ELEVATE WITH INNOVATION

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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 "IT NetworkZ , Nagpur"

Aim: To provide comprehensive training and expertise in IT domains, including a Cyber security and cloud computing.

Department of Computer Science & Engineering of Tulsiramji Gaikwad Patil College of Engineering & Technology, Polytechnic, Nagpur student visited "IT NetworkZ, Nagpur". The Manager of IT NetworkZ gave detailed information regarding Cyber security & Cloud computing. The Visit to IT NetworkZ is an excellent opportunity to gain hands on experience and in- depth knowledge about cyber security and cloud computing.

Industrial Visit

Department of **Computer Science &Engineering** have organized an Industrial visit at "Yantra Institute of Technology & Management, Nagpur"

Aim: To gain hands-on experience and industry insights in cutting-edges technologies.

Department of Computer Science & Engineering of Tulsiramji Gaikwad Patil College of Engineering & Technology, Polytechnic, Nagpur student visited "Yamtra Institute of Technology & Management, Nagpur". The Director of Yamtra Institute of Technology & Management gave detailed information regarding Computer-Aided Design, Robotics and Automation.

During the visit, they were given a detailed overview about cyber security and cloud computing. Some key points observed include:

Guest Lecture

The Department of **Computer Science and Engineering Polytechnic** at TGPCET successfully organized a two-day workshop on C++ and Advanced Java, aimed at enhancing students' programming proficiency and industry readiness.

The workshop was conducted by Mr. Rohan Nachane, a seasoned expert in software development and programming. Over the span of two days, students gained hands-on experience in core C++ concepts and advanced Java techniques, including object-oriented programming, data structures, and practical application building.

The session witnessed enthusiastic participation from students, who appreciated the practical insights and interactive learning approach. The department expressed gratitude to Mr. Nachane for sharing his expertise and making the workshop a valuable learning experience.

Guest Lecture

The **Department of Information Technology** has organized a Expert Lecture on topic "Machine Learning & Data Analytics" by Mr. Karan Chaudhary, Director, VKV Engineering Solutions Nagpur.

Aim: To focus on how to develop techniques of Machine learning and Data Analytics.

The Program is organized on 14 August 2024. The Technical skill develop lecture is given by **Mr. Karan Chaudhary**, Director VKV Engineering Solutions Nagpur, TGPCET Nagpur, start at 11.00 AM. He emphasized his lecture directing the students to overall idea about things and knowledge of technical skill yourself in jobs and also both tools that help businesses and individuals make sense of large amounts of data to make better decisions.

Guest Lecture

Department of **Computer Science & Engineering Polytechnic** under ISTE and IE(I) student chapter have organized Expert Lecture on topic "Esensense of Indian Constitution" by Mr. Chaitanya Bharat, Dyandeep Education Nagpur.

Mr. Chaitanya Bharat sir explained, The expert lecture on the Essence of the Indian Constitution will provide an in-depth understanding of the core principles, structure, and functioning of India's supreme legal document. This lecture aims to delve into the philosophical foundations of the Constitution, exploring the ideals enshrined in its Preamble such as sovereignty, socialism, secularism, democracy, and republic and their relevance to contemporary India.

The lecture will also cover the amendment process, which strikes a delicate balance between rigidity and flexibility. This mechanism allows the Constitution to evolve and adapt to changing socio-political realities while preserving its core integrity.

Activity Conducted

Saturday Cultural Fiesta Lights Up TGPCET Campus

The Computer Science and Engineering Department (Polytechnic) of Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) hosted a vibrant cultural event this Saturday, filled with enthusiasm and creativity. Students actively participated in a range of performances including singing, dancing, poetry recitation, and a lively group discussion (GD).

The event provided a refreshing break from academics and a perfect stage for students to showcase their talents. The energy and excitement on campus reflected the vibrant spirit of the department and made the day truly memorable for all.
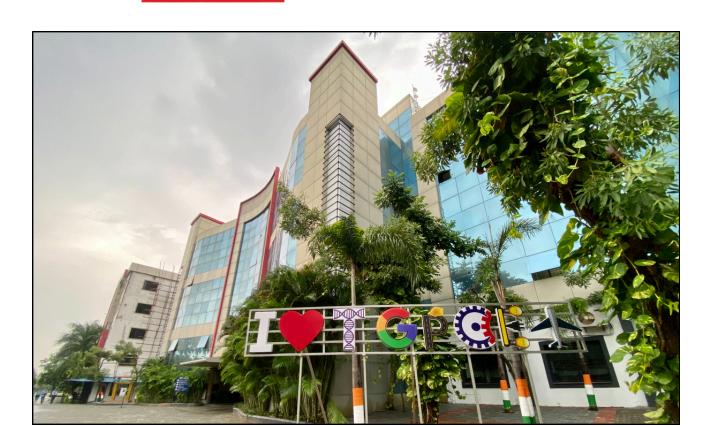
Personality Development

Polytechnic CSE Department has organized a Personality Developments Lecture on topic "The Power of Visualization and Enhancing Decision-Making Skills" by Mr. Alan Abrahim, Soft Skill Trainer, and TGPCET Nagpur.

Aim: To focus on how to develop technical skills, and the power of visualization and enhancing decision-making, soft skills

The Programme is organized on 22 July 2024. The introduction and brief about the Personality Developments Lecture are given by Mr. Alen Abrahim, Soft Skill Trainer, TGPCET Nagpur, start at 10:30 am. He emphasized her lecture directing the students to overall idea about the Power of Visualization and Enhancing Decision-Making. Positive things and hoe to strengthen you during tough phase in jobs.

Courses we Offer:

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