



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —



Department of Artificial Intelligence &
Machine Learning

News letter



AI is the future

Vision of Institute:

To emerge as a learning Centre of Excellence in the National Ethos in domains of Science, Technology and Management.

Mission of Institute:

1. To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.
2. To provide facilities and services to meet the challenges of Industry and Society.
3. To facilitate socially responsive research, innovation and entrepreneurship.
4. 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 Centre of Excellence in the National Ethos in the domains of Artificial Intelligence & Machine Learning.”

Mission of the Department:

- To provide quality technical education that equips students with practical skills and knowledge aligned with current industry standards and emerging technologies.
- To address societal and industrial challenges by fostering collaboration between academia, industry, and communities for inclusive development.
- To nurture innovation and entrepreneurial thinking by encouraging creativity, problem-solving, and the development of impactful solutions.
- To promote a culture of research, critical thinking, and continuous learning to empowers, stakeholders to adapt and thrive in a dynamic global landscape.

PEO's & PSO's

PEO 1:	Develop strong analytical, predictive, and decision-making skills to formulate and solve complex problems in intelligent computing and interdisciplinary domains
PEO 2:	Pursue advanced studies, engage in research, and drive innovation in Machine Learning and related fields, contributing to technological and scientific progress.
PEO 3:	Apply technical knowledge with a commitment to ethical standards and professional integrity, ensuring stakeholder satisfaction and making a positive societal impact.
PEO 4:	Embrace lifelong learning while upholding values of professional ethics, social responsibility, and environmental sustainability.

Program Specific Outcomes (PSO)

- PSO 1: Develop and apply AI/ML competencies using domains such as Computer Vision, Deep Learning, and MLOps to address real-world challenges across various sectors.
- PSO 2: Design and implement intelligent solutions by leveraging Natural Language Processing, Reinforcement Learning, and Robotics.
- PSO 3: Adopt engineering best practices and industry exposure to develop practical software systems and engage in impactful research activities.

Program Outcomes (PO)

- **PO1: Engineering Knowledge:** Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop the solution of complex engineering problems.
- **PO2: Problem Analysis:** Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)
- **PO3: Design/Development of Solutions:** Design creative solutions for complex engineering problems and design/develop systems/ components/ processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)
- **PO4: Conduct Investigations of Complex Problems:** Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).
- **PO5: Engineering Tool Usage:** Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)
- **PO6: The Engineer and The World:** Analyze and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).
- **PO7: Ethics:** Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)
- **PO8: Individual and Collaborative Team work:** Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.
- **PO9: Communication:** Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences
- **PO10: Project Management and Finance:** Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
- **PO11: Life-Long Learning:** Recognize the need and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

About College



Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahuuddeshiya Sheshan Sanstha (VBSS), a registered society. It is a self-financed Private Engineering College, which is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) Nagpur and is approved by All India Council for Technical Education, New Delhi. Also, college is approved by Directorate of Technical Education (DTE), Mumbai, and Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC) and NBA. An Autonomous Institute affiliated to RTM Nagpur University, Nagpur.

The College offers four years UG programs in Nine disciplines of engineering viz. Bio-Technology (B.Tech), Aeronautical Engineering (AE), Computer Science and Engineering (CSE), Information Technology (IT), Electronics and Communication Engineering (ECE), Mechanical Engineering (ME), Civil Engineering (CE), Electrical Engineering (EE) Computer Science and Engineering (Data Science). TGPCET offers Eight PG programs in engineering viz. Computer Science and Engineering (CSE), Integrated Power System (IPS), Structural Engineering (SE), Electronics and Communication Engineering (ECE), Artificial Intelligence, Machine Learning (AIML) & Mechanical Engineering design (MED), Aeronautical Engineering (AERO) and Electric Vehicle (EVT) and also offers Two years PG programs.

Management



Dr. Mohan Gaikwad-Patil

Chairman, Gaikwad-Patil Group

“Education is the passport to the future, for tomorrow belongs to those who prepare for it today.” Dr. Mohan Gaikwad-Patil, with more than 35 years of experience in the education system to his credit, established the Gaikwad-Patil Group of Institutions in Nagpur to cater to the quality education needs of the youth in Vidarbha. His early experience teaching in an engineering college made him acutely aware of the dissonance between engineering education in the country and the requirements of the industry. He therefore began with the dream of starting an engineering college that equips students with knowledge, skills, and attitudes relevant to the industry. That dream has manifested today in the form of an educational group well known in the region for its constant striving to impart quality and industry-relevant education to the students by teaching courses like B.Tech, M.Tech, Architecture, Polytechnic, MBA, MCA, Pharmacy, BAMS, Physiotherapy and Nursing. Hardly in his early forties, Dr. Mohan Gaikwad-Patil is the young and dynamic face of the group. His contagious enthusiasm and unflagging drive are truly inspiring.



MR. AKASH GAIKWAD-PATIL

Vice Chairman, Gaikwad-Patil Group

“Education is not preparation for life; education is life itself.” In a world brimming with challenges, the need for brilliant engineers who can think critically, solve problems creatively, and adapt to a rapidly evolving technological landscape has never been greater. At TGPCET, we are committed to providing an education that goes beyond textbooks. Our curriculum is meticulously crafted to equip students with the technical expertise, soft skills, and design thinking abilities necessary to thrive in the ever-changing engineering landscape. We believe in nurturing well-rounded individuals with a strong foundation in ethics, social responsibility, and a passion for making a positive impact on the world. Our state-of-the-art facilities, coupled with a dedicated and experienced faculty, provide a stimulating learning environment that ignites curiosity and encourages exploration. We don't just produce engineers; we empower future leaders, innovators, and entrepreneurs who will shape the world of tomorrow. We are confident that our graduates will be at the forefront of technological advancements, tackling global challenges, and building a future brimming with possibilities.



DR. ANJALI PATIL-GAIKWAD

President, Gaikwad-Patil Group of Institutions

“Shaping Minds, Building Futures: Welcome to the Engineering Innovation Hub.”

“Welcome to TGPCET, a premier institution dedicated to nurturing exceptional engineers who can shape the world of tomorrow. Here, we believe in cultivating a stimulating learning environment that fosters creativity, critical thinking, and a passion for innovation. Our vision is to provide a holistic learning experience that equips you with the technical expertise, leadership skills, and innovative thinking needed to thrive in a dynamic industry. With a rich legacy of academic excellence, we offer a diverse range of engineering and management programs designed to equip you with the knowledge, skills, and experiences needed to thrive in the ever-evolving engineering landscape. Our dedicated faculty, state-of-the-art facilities, and strong industry partnerships ensure you receive a well-rounded education that prepares you for success in your chosen field. We invite you to join our vibrant community and embark on a journey of excellence.”



DR. SANDEEP GAIKWAD

Treasurer, Gaikwad-Patil Group of Institutions

“Creating a Brighter Tomorrow, One Investment at a Time: Your Pathway to Engineering Excellence .”

The essence of life is to live a life for others and die for a noble cause. We express our gratitude for receiving an opportunity to serve the nation. We have a crystal-clear vision of enlightening the student brain with a sound and technology-rich academic curriculum. We pledge to ensure that the students will not only progress in their respective fields but will also become responsible citizens by abiding by the rules and will live a disciplined life. Our college has state-of-the-art facilities for teaching, research and development. The students who have passed out of our college have already proved their mettle in various fields. I personally appeal to all the students to make use of the facilities here and improve their skills to have a glorious career ahead.



DR. P. L. NAKTODE

Principal@tgpct.com

“Nurturing Innovation, Empowering Leaders - Engineering Education Redefined .”

It is my privilege to warmly welcome you to our college—an autonomous institution committed to quality education. We work on the principle of “Learn to Grow.” With this inspiring thought, Vidarbha Bahu Uddeshiya Shikshan Sanstha, Nagpur laid the foundation to provide education in the field of engineering, enabling students to become skilled engineers, capable managers, and above all, responsible human beings dedicated to building a stronger, vibrant, and skilled India.

We envision TGPCET playing a significant role in shaping the careers of tomorrow’s leaders and developing individuals who will make a meaningful impact on global development



DR. PRAGATI PATIL

Vice Principal

viceprincipal@tgpct.com

Welcome to Tulsiramji Gaikwad Patil College of Engineering and Technology (TGPCET), Nagpur, Maharashtra—a leading educational institution.

Inspired by the words of Dr. A.P.J. Abdul Kalam, "Dreams are not those which we see while sleeping, but dreams are those which do not let us sleep," TGPCET pursues ambitious goals through knowledge acquisition, hard work, and perseverance.

Our institution has rapidly emerged as one of Maharashtra’s premier centers for technical education. We emphasize academic excellence and the development of technical skills to meet industry demands while instilling values of integrity, morality, and sustainability.

About Department:

Department of Artificial Intelligence and Machine Learning of Tulsiramji Gaikwad-Patil College of Engineering and Technology Founded in 2024, the Department of Artificial Intelligence and Machine Learning at Tulsiramji Gaikwad-Patil College of Engineering and Technology has swiftly become a prominent centre for advanced learning and research in this rapidly evolving field. The department offers a B.Tech. program in Artificial Intelligence and Machine Learning with an annual intake of 150 students. Our core mission is to nurture young talent and prepare them to excel in the dynamic and fast-paced world of AI.

The B.Tech. program is designed to meet the increasing demand for skilled professionals capable of leveraging data, creating intelligent systems, and driving innovation across industries. AI and ML, as interdisciplinary fields, focus on building systems that enable intelligent decision-making and problem-solving.

Aligned with the National Education Policy (NEP), our curriculum ensures a strong balance between theoretical foundations and hands-on practical skills. We regularly conduct skill development workshops and training sessions in collaboration with industry experts to bridge the gap between academia and industry. Students benefit from annual industry visits and a compulsory six-month internship, providing real-world experience and exposure to current industry challenges. Additionally, the department has established MoUs with leading organizations to foster collaborative learning and innovation.

From the desk of HOD



Prof. Suraj Mahajan

Head, Artificial Intelligence & Machine Department

BE, ME, PG cerf.AIML IIIT

hod.aiml@tgpct.com

Department of Artificial Intelligence and Machine Learning of Tulsiramji Gaikwad-Patil College of Engineering and Technology Founded in 2024, the Department of Artificial Intelligence and Machine Learning at Tulsiramji Gaikwad-Patil College of Engineering and Technology has swiftly become a prominent centre for advanced learning and research in this rapidly evolving field. The department offers a B.Tech. program in Artificial Intelligence and Machine Learning with an annual intake of 150 students. Our core mission is to nurture young talent and prepare them to excel in the dynamic and fast-paced world of AI. The B.Tech. program is designed to meet the increasing demand for skilled professionals capable of leveraging data, creating intelligent systems, and driving innovation across industries. AI and ML, as interdisciplinary fields, focus on building systems that enable intelligent decision-making and problem-solving.

EDITORIAL BOARD



Faculty Editor-in-chief AIML Department

It gives me immense pleasure to present this edition of the Departmental Newsletter. This publication reflects the collective efforts, academic excellence, and continuous progress of our department. The newsletter highlights significant achievements, scholarly contributions, expert lectures, research publications, and co-curricular activities undertaken during this period. I sincerely appreciate the dedication and enthusiasm of our faculty members, students, and staff, whose consistent efforts have made this compilation possible. Their commitment to academic growth, innovation, and knowledge sharing continues to strengthen the department's vision and mission. I extend my heartfelt gratitude to the Respected Head of the Department and the institute authorities for their constant guidance and encouragement. I hope this newsletter serves as a valuable source of information and inspiration for all readers.

Editorial Committee



Pawar Avinash Abasaheb

Student Editor-in-chief

(2nd Year)



Dolly Ramesh Diwate

Student Editor-in-chief

(2nd Year)



Dere Gajanan Sakharam

Student Editor-in-chief

(2nd Year)

Table of Contents

Sr.No.	Contents	Page Number
1	Industrial visits	13-16
2	Workshop	17-18
3	Expert Lectures	19-20
4	Events	21-23
5	Students Achievements	24-25
6	Creative Corner	26
7	Rank Holders	27

INDEX

❖ Industrial Visit

1. Industrial Visit to Shri Ramdeobaba College of Engineering & Management (RCOEM) - Tata Technologies Ltd. CIIT, Nagpur
2. Industrial Visit at Siemens Jamadar Centre of Excellence, VNIT, Nagpur
3. Industrial Visit to Maharashtra Remote Sensing Center (MRSC), Nagpur
4. Industrial Visit to Prevoyance IT Solutions, IT Park Nagpur

❖ Workshop

1. Workshop on Web Development & Data Analytics (React)
2. Workshop on Machine Learning and AI with Python

❖ Expert Lecture

1. Guest Lecture on Emerging trends & Application of Python Programming
2. Guest Lecture on Exploratory Data Analysis

❖ Events

1. Induction Program
2. Algnite Forum
3. Parents - Teacher Meet 2k25

❖ Student Achievements

1. Chess Competition Championship
2. Poster Presentation in BIO-FAIR 2K25

❖ Creative Corner

❖ Rank Holders

1. Industrial Visit to Shri Ramdeobaba College of Engineering & Management (RCOEM) - Tata Technologies Ltd. CIIT, Nagpur



Date of Visit: 14/08/2025

The Industrial Visit of the III Semester students of the Department of Artificial Intelligence & Machine Learning, Tulsiramji Gaikwad Patil College of Engineering & Technology, Nagpur to the Shri Ramdeobaba College of Engineering & Management (RCOEM) – Tata Technologies Ltd. Center for Invention, Innovation, Incubation & Training (CIIT), Nagpur was organized with the primary objective of enhancing the academic learning of students through practical industrial exposure.

The major purposes of the visit were as follows:

- To provide students an opportunity to explore the state-of-the-art facilities at Tata Technologies CIIT.
- To familiarize students with industrial practices, modern tools, and technologies such as Industry 4.0, automation, robotics, CAD/CAM/CAE, IoT, and digital manufacturing.
- To promote interaction between students and industry experts, thereby bridging the gap between academia and industry.
- To make students aware of industry expectations, skill requirements, and career opportunities in emerging technologies.
- To strengthen collaboration through knowledge sharing, internships, and future training programs.

This visit served as a valuable experience for students, enabling them to understand the practical applications of their academic curriculum while motivating them towards research, innovation, and skill development in Artificial Intelligence, Machine Learning, and Industry 4.0 technologies.

The Tata Technologies Ltd. CIIT at RCOEM is a state-of-the-art facility established in collaboration with the Government of Maharashtra and Tata Technologies Ltd. to promote advanced skill development, research, and innovation in engineering and manufacturing technologies. The center is equipped with world-class laboratories and training modules in areas such as:

- Product Design & Development (CAD/CAE/PLM)
- Advanced Manufacturing & CNC Programming
- Automation, Robotics & Mechatronics
- Industry 4.0 and Smart Factory Concepts
- Internet of Things (IoT) and Digital Twin
- Additive Manufacturing (3D Printing) and Virtual Simulation

2. Industrial Visit at Siemens Jamadar Centre of Excellence, VNIT, Nagpur



Date of Visit: 23/07/2025

The Industrial Visit of the III Semester students of the Department of Artificial Intelligence & Machine Learning, TGPCET, Nagpur to the V.R. Jamdar Siemens Centre of Excellence, VNIT, Nagpur was organized with the primary objective of enhancing the academic learning of students through industrial exposure.

The major purposes of the visit were as follows:

- To provide students an opportunity to explore the state-of-the-art facilities at Siemens Centre of Excellence.
- To familiarize students with industrial practices, modern tools, and technologies such as Industry 4.0, automation, robotics, IoT, and digital manufacturing.
- To promote interaction between students and industry experts, thereby bridging the gap between academia and industry.
- To make students aware of industry expectations, skill requirements, and career opportunities in emerging technologies.
- To strengthen collaboration through knowledge sharing, internships, and future training programs.

This visit served as a valuable experience for students, enabling them to understand the practical applications of their academic curriculum while motivating them towards research, innovation, and skill development in Artificial Intelligence and Machine Learning.

The Siemens Centre of Excellence is a state-of-the-art facility established in collaboration with Siemens, aimed at promoting advanced skill development, research, and innovation in manufacturing and digital technologies.

3. Industrial Visit to Maharashtra Remote Sensing Center (MRSC), Nagpur



Date of visit: 14/07/2025

The Industrial Visit of the III Semester students of the Department of Artificial Intelligence & Machine Learning, TGPCET, Nagpur to the Maharashtra Remote Sensing Center (MRSC), Nagpur was organized with the primary objective of providing students practical exposure to Remote Sensing, Geographic Information Systems (GIS), and Artificial Intelligence applications in real-world problem-solving for **social good**.

The major purposes of the visit were as follows:

- To provide students an opportunity to explore the advanced facilities at MRSC and understand their role in geospatial research and development.
- To familiarize students with applications of AI, ML, and Remote Sensing in domains such as agriculture, water resource management, forestry, disaster management, and urban planning.
- To bridge the gap between theoretical knowledge and practical implementation by showcasing AI for social good.
- To encourage interaction between students and domain experts for insights into career opportunities and skill requirements in geospatial and AI technologies.
- To promote awareness among students about how technology empowers humanity and supports sustainable development.

This visit served as a valuable experience for students, enabling them to connect their academic learning with real-world applications in geospatial intelligence while motivating them towards research, innovation, and the responsible use of AI in solving societal challenges.

The Maharashtra Remote Sensing Center (MRSC), Nagpur is a pioneering institute dedicated to applying Remote Sensing, GIS, and AI technologies for resource management, environmental sustainability, and disaster resilience. The center actively works on projects that leverage satellite imagery, spatial analysis, and data-driven decision-making to support government policies, industries, and society at large.

- MRSC focuses on:**
- Agricultural Monitoring and Soil Health
 - Water Resource and Irrigation Planning
 - Forestry and Environmental Management
 - Urban Growth and Infrastructure Planning
 - Disaster Management and Climate Resilience
 - AI and Machine Learning in Geospatial Analytics

4. Industrial Visit to Prevoyance IT Solutions, IT Park Nagpur



The industrial visit to Prevoyance IT Solutions Pvt. Ltd., Nagpur was organized to provide students with practical exposure to the functioning of a professional IT company. Prevoyance is a growing technology firm that specializes in software development, mobile and web application development, software testing, digital transformation, and startup support services. Located in the IT hub of Nagpur, the company works on innovative solutions that cater to both domestic and international clients.

This visit offered students an opportunity to connect their classroom knowledge with real-world industry practices, understand the workflow of software projects, and interact with experienced professionals.

The major purposes of the visit were as follows:

- To gain practical insights into the Software Development Life Cycle (SDLC) and its implementation in real projects.
- To understand the role of software testing, quality assurance, and project management in delivering reliable solutions.
- To explore how mobile and web applications are designed, developed, and deployed in the IT industry.
- To observe the organizational structure, work culture, and collaboration among different teams.
- To learn about the skills, tools, and technologies currently in demand in the IT sector.
- To motivate students by showcasing career opportunities, internship prospects, and future growth paths in the IT industry.

This visit served as a valuable experience for students, enabling them to understand the practical applications of their academic curriculum while motivating them towards research, innovation, and skill development in Artificial Intelligence, Machine Learning, Software Engineering, and Digital Transformation.

Prevoyance IT Solutions – Areas of Expertise

Prevoyance IT Solutions is a technology-driven company focused on delivering innovative and customized IT solutions to clients across multiple domains. The company is equipped with specialized teams and expertise in areas such as:

- **Web Application Development** – Building scalable, secure, and user-friendly web platforms tailored to client requirements.
- **Mobile Application Development** – Designing and deploying cross-platform mobile apps (Android and iOS) with modern UI/UX frameworks.
- **Software Testing & Quality Assurance** – Ensuring bug-free, high-performance solutions through manual and automated testing methods.

1. Workshop on Web Development & Data Analytics (React)

Date of workshop: - 28th to 30th August 2025



Expert: Ms. Pooja Manwatkar (Patil), Director, IT DAKSH, Nagpur.

The Three-Day Workshop on “Web Development & Data Analytics (React)” for the students of the Department of Artificial Intelligence & Machine Learning, TGPCET, Nagpur, was organized with the primary objective of enhancing practical technical learning through real-time development experience and applied analytical skills.

The major purposes of the workshop were as follows:

- To provide students with hands-on exposure to modern web development methodologies and frontend frameworks.
- To familiarize participants with the React ecosystem, component-based architecture, and dynamic UI development.
- To introduce the core principles of data analytics, data handling, and visualization techniques in real-world applications.
- To enable interaction with experienced trainers, thereby bridging theoretical classroom learning with industry-oriented programming practices.
- To equip students with essential technical competencies required for career opportunities in web development, data analysis, and software engineering domains.
- To encourage students toward innovative application development, full-stack approaches, and advanced coding capabilities.

This workshop served as a highly enriching experience, allowing students to understand the practical implementation of frontend technologies and analytical models while motivating them toward continuous learning, problem-solving, and skill development in Web Engineering and Data-Driven Applications.

The workshop provided participants with structured training sessions and project-oriented learning modules in areas such as:

- Modern HTML, CSS & JavaScript development
- React components, hooks, and state management
- REST API data fetching and integration
- Data processing and representation techniques
- Visualization through UI dashboards and charting tools
- Deployment and debugging practices

2. Workshop on Machine Learning and AI with Python

Date of workshop: - 19th – 20th September 2025



Expert: Mr. Parag Dhawan, Senior Associate Consultant at Infosys Technologies Pvt. Ltd.

Artificial Intelligence & Machine Learning, TGPCET, Nagpur, was organized with the objective of building practical understanding and technical competency in modern data-driven technologies. The workshop aimed to enable students to explore the fundamentals of Machine Learning (ML) and Artificial Intelligence (AI), while gaining hands-on experience in Python-based implementation techniques under the guidance of an industry expert.

The major purposes of the workshop were as follows:

- To introduce students to core concepts of AI and Machine Learning methodologies.
- To provide hands-on coding experience in Python for data processing and algorithm implementation.
- To familiarize students with widely used ML libraries and tools such as NumPy, Pandas, Scikit-Learn, and Matplotlib.
- To help students understand real-world applications of AI such as regression, classification, clustering, and predictive modeling.
- To bridge academic knowledge with practical implementation of AI solutions.
- To encourage analytical thinking, problem-solving skills, and data-driven decision making.

This workshop served as a valuable learning experience by allowing students to connect theoretical concepts of AI and ML with actual programming practices, thereby motivating them toward deeper exploration, research, and innovation in Artificial Intelligence and Data Science disciplines.

1. Guest Lecture on Emerging trends & Application of Python Programming

Date: - 21/07/2025



Expert: Mr. Akshay Jain, Centre Head, Edverciity, Nagpur

The guest lecture on “Emerging Trends & Applications of Python Programming” was conducted to provide students with insight into how Python is shaping modern technological developments across various fields.

The session aimed to enhance students’ awareness of Python’s versatility, real-world implementation, and relevance in industries such as AI, machine learning, automation, web development, and data science. The lecture offered valuable exposure to industry practices, current advancements, and future opportunities associated with Python programming.

The major purposes of the workshop were as follows:

- To introduce students to the emerging technological trends driven by Python programming.
- To demonstrate practical applications of Python in areas such as AI, machine learning, automation, and web development.
- To enhance student understanding of Python’s role in solving real-world industry problems.
- To bridge the gap between classroom learning and industry requirements through expert insights.
- To motivate students to develop Python-based skills for academic research, internships, and career opportunities.
- To provide exposure to modern libraries, frameworks, and tools commonly used in professional Python development.
- To inspire students to pursue Python as a core competency for future technological learning and innovation.

2. Guest Lecture on Exploratory Data Analysis

Date of workshop: - 5/7/2025



Expert: Mansi Patil, Software Engineer at Accenture Solutions Pvt. Ltd, Pune
The Guest Lecture on “Exploratory Data Analysis (EDA) using Python” was conducted to provide students with practical exposure to data exploration, visualization, and interpretation techniques. The session focused on developing a strong foundation in understanding datasets, identifying data patterns, and using Python libraries to perform meaningful analysis. It enabled students to gain insights into the data-driven decision-making process widely applied in AI, ML, and analytics industries.

The major purposes of the workshop were as follows:

- To introduce students to the concepts and importance of Exploratory Data Analysis in data science.
- To provide hands-on experience in exploring and interpreting datasets using Python.
- To familiarize participants with essential Python libraries such as Pandas, NumPy, Matplotlib, and Seaborn for data analysis and visualization.
- To enhance students’ ability to identify missing values, detect anomalies, and understand data distributions.
- To develop analytical thinking by encouraging students to draw meaningful insights from raw data.
- To prepare students for advanced learning in machine learning and statistical modeling.
- To promote practical skills that can be applied in real-world research, academic projects, and industry use cases.

This Guest Lecture served as a valuable learning experience by enabling students to translate theoretical knowledge of data analytics into practical Python-based data handling and visualization, thereby encouraging deeper analytical thinking, problem-solving skills, and further engagement in Data Science and AI applications.

Events

1. Induction Program



Glimpses of Induction Program

The Department of Artificial Intelligence and Machine Learning successfully organized an Induction Program on 16th July 2025 to welcome the newly admitted students into the department.

The program aimed to familiarize students with the academic structure, departmental vision, curriculum framework, and opportunities for technical and professional growth. Faculty members guided students on academic expectations, code of conduct, and the importance of active participation in curricular and co-curricular activities.

The session marked a positive beginning of the academic journey for the new batch, fostering confidence, clarity, and enthusiasm while reinforcing the department's commitment to excellence and student-centric learning.

2. Aignite Forum



Participants, winners, and faculty members during the AIGNITE Forum 2025

The Department of Artificial Intelligence and Machine Learning successfully conducted the AIGNITE Forum on 7th August 2025, creating an engaging academic platform to inspire innovation, critical thinking, and technical excellence among students.

The forum featured Quiz and Poster Competitions, which witnessed active and enthusiastic participation from students across various semesters. The Quiz Competition assessed participants' conceptual clarity and awareness of contemporary developments in Artificial Intelligence and Machine Learning, encouraging analytical thinking and healthy academic competition.

The Poster Competition provided students with an opportunity to present innovative ideas, research insights, and real-world applications of AI and ML. The quality of presentations reflected strong research orientation, creativity, and effective communication skills nurtured by the department.

The AIGNITE Forum 2025 concluded on a motivating note, reinforcing the department's commitment to holistic learning, innovation, and continuous academic enrichment.

3. Parents -Teacher Meet 2k25



Glimpses of the Parents–Teacher Meeting

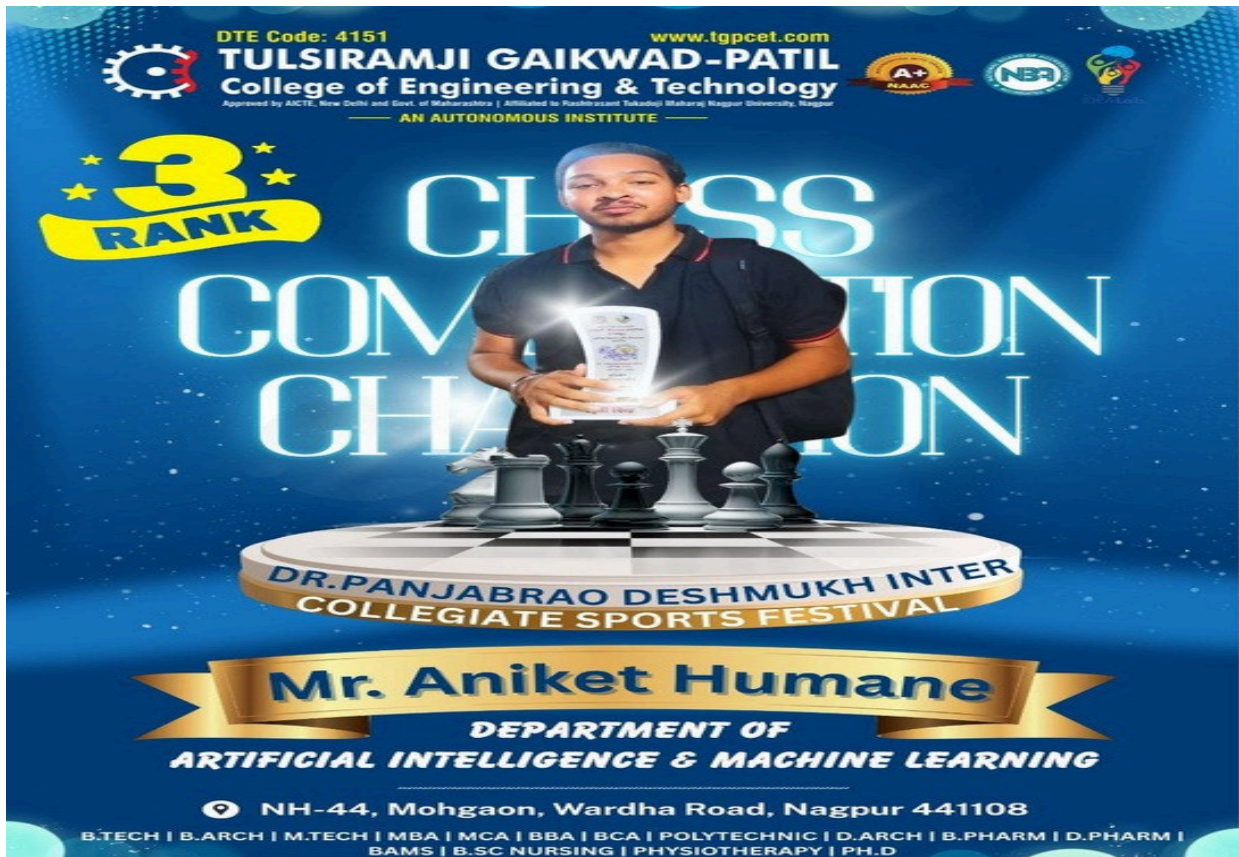
The Department of Artificial Intelligence and Machine Learning conducted a Parents–Teacher Meeting on 1st September 2025 to strengthen coordination between parents and faculty for students’ academic development.

The meeting enabled constructive interaction on students’ academic progress, attendance, and overall performance. Parents were briefed about departmental initiatives, while faculty members provided feedback and guidance to support students’ holistic growth.

The interaction concluded positively, reinforcing the department’s commitment to effective mentoring, transparency, and continuous academic improvement.

Student Achievements

1. Chess Competition Championship



Mr. Aniket Humane Received Award in Chess Championship

The Chess Competition Championship was held as part of the Dr. Panjabrao Deshmukh Inter-Collegiate Sports Festival, witnessing enthusiastic participation from students representing various colleges.

Proud Moment for the Department of AI & ML

The Department of Artificial Intelligence & Machine Learning (AI & ML) proudly announces that Mr. Aniket Humane, a student of the AI & ML Department, secured 3rd Rank in the Chess Competition Championship. His strategic thinking, analytical skills, and sportsmanship were commendable throughout the tournament.

The AI & ML Department congratulates Mr. Aniket Humane on his notable achievement and appreciates his dedication to both academics and extracurricular excellence. Such achievements highlight the department's encouragement of holistic student development through participation in academic and sports activities.

2. Poster Presentation in BIO-FAIR 2K25



Ms.Dolly Diwate Received Award for Best Poster Presentation in BIO-FAIR 2K25

Date: 29th and 30th September 2025

Proud Moment for the Department of AI & ML

Bio-Fair 2K25 was successfully organized by the Department of Biotechnology, Tulsiramji Gaikwad-Patil College of Engineering, on 29th and 30th September 2025, with enthusiastic participation from students across various departments.

The event served as an excellent platform for students to showcase their innovative ideas, research aptitude, and interdisciplinary knowledge through poster presentations and other technical activities.

The Department of Artificial Intelligence & Machine Learning (AI & ML) proudly announces that Ms. Dolly Diwate, a student of the AI & ML Department, won the Best Poster Presentation Award at Bio-Fair 2K25. Her poster was highly appreciated by the judges for its originality, clarity of presentation, and effective integration of technology with biological concepts.

The AI & ML Department congratulates Ms. Dolly Diwate on her commendable achievement and extends appreciation to the Department of Biotechnology for organizing such a knowledge-enriching event. Achievements like these highlight the academic excellence, creativity, and innovative spirit of our students.

Creative Corner



Name: Shrusti Bangde
Branch: AIMA 2nd yr



Name: Shrusti Bangde



Name: Shrusti Bangde
Branch: AIMA 2nd yr



NAME : SIDDHI DEOTRAE
BRANCH : AIMA 2ND YEAR



NAME : SIDDHI DEOTRAE
BRANCH : AIMA 2ND YEAR



who you are?
do you know?

NAME : SIDDHI DEOTRAE

Rank Holders

1st Rank Achiever



Avinash Pawar (SGPA 9.32)



Dolly Diwate (SGPA 9.32)



Palak Harinkhede (SGPA 9.32)

2nd Rank Achiever



Suraj D. Badole (SGPA 9.23)

3rd Rank Achiever



Ritika Shindemeshram (SGPA 9.18)



Vrishali Gaikwad (SGPA 9.18)