



NAAC Accredited

TULSIRAMJI GAIKWAD-PATIL

College of Engineering & Technology

— An Autonomous Institute —

Vidarbha Bahu-uddeshiya Shikshan Sanstha's



**DEPARTMENT OF COMPUTER
SCIENCE AND ENGINEERING
PRESENTS**

**BYTE
CODE**

CSE

**BY Emulous Innovating Minds
A CSE FORUM MAGAZINE
SESSION : 2024-25 (Odd Sem)**



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151**NBA**
NATIONAL BOARD
OF ACCREDITATION

About TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiya Shikshan 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, Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC). An Autonomous Institute affiliated to RTM Nagpur University, Nagpur.

Vision of Institute

To emerge as Learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.

Mission of Institute

- To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.
- To provide facilities and services to meet the challenges of Industry and Society.
- To facilitate socially responsive research, innovation and entrepreneurship.
- To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices.



About Department

Established with B.E. CSE in the year 2007-08 with an intake of 150 and M. Tech CSE in 2011-12 with an intake of 18. Department focus on Research and training activities are based on -

- Advanced computational methods for modeling, analyzing, and solving complex tasks in technology and science.
- Fundamental computer science methods for the analysis of large and high- dimensional data sets For the modeling and design of complex software, networking and other computational systems.
- Exposing students to the developments in the field of computing, thereby enabling them to meet the needs of the IT industry and research organizations in India and abroad.

Vision of Department

To become a centre of excellence for nurturing the quality Computer Science & Engineering professionals to cater the needs of industry and society.

Mission of Department

- To achieve academic excellence by imparting in-depth knowledge to the students through effective pedagogies and hands on experience on latest tools and technologies.
- Inculcating professional behavior, strong ethical values, innovative research capabilities and leadership abilities in graduates.



Program Education Outcome

- PEO1: Apply mathematical knowledge mathematics and logical programming to frame engineering solutions in the computing domain.
- PEO2: Analyze the real life problems and apply latest tools for developing software solutions.
- PEO3: Apply emerging technology by communicating effectively as a team.
- PEO4: Enhance the quality, security, privacy, cost utility, etiquette and ethics by their computing abilities.
- PEO5: Adapt emerging technology and advances in careers for fulfilling the societal needs to protect the environment for lifelong learning.

Program Specific Outcome

- PSO 1 - Basic Fundamental: Analyse fundamental knowledge of computer science to analyze complex problem and design effective solution.
- PSO 2 - Design and Implementation: Apply modern tool to solve engineering, societal problem and communicate effectively as team member in software project management.
- PSO 3 – Higher Studies and Entrepreneur: The ability to use modern computer technologies to create career paths for higher studies and entrepreneurship, also inculcate moral values and ethics for lifelong learn



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151**NBA**
NATIONAL BOARD
OF ACCREDITATION

Program Outcome

- 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems .**
- 2.Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.**
- 3.Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.**
- 4.Conduct investigations of complex problems: Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.**
- 5.Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and software tools including prediction and modeling to complex engineering activities with an understanding of the limitations.**
- 6.The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.**
- 7.Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.**
- 8.Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.**
- 9.Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.**
- 10.Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.**
- 11.Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.**
- 12.Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.**

Messages



Dr. Mohan Gaikwad Patil
Chairman, Gaikwad-Patil Group
of Institutes

I am delighted that Department of Computer Science and Engineering of Tulsiramji Gaikwad-Patil College of Engineering & Technology has published the Department magazine. The Editorial Board has done a fair job to put up facts before students, parent and community. To express one's thought, Department Magazine is the best platform and this is what our students have expressed in terms of contributions towards the magazine. I congratulate Editorial Board for unleashing the hidden potential of the student and making this Magazine a chapter of Tulsiramji Gaikwad-Patil College of Engineering.



Dr. P. L. Naktode
Principal

As the principal of the college, it is my testimony here that, in the past year, despite the challenges presented by the global landscape, our students and faculty have displayed remarkable resilience and adaptability. From groundbreaking research initiatives to artistic expressions that stir the soul, each contribution adds to the unique character of our college. As we delve into the pages of this e-magazine, I encourage you to embrace the stories, insights, and accomplishments that showcase the collective spirit of our community. It is through collaboration, understanding, and a shared commitment to excellence that we continue to shape the future of our college



Prof. Pragati Patil
Vice Principal

At the outset, I warmly applaud TGPCET for bringing us the latest edition of the college magazine "BYTE 23". This magazine is intended to bring out hidden literacy talent of students and faculty and also to inculcate leadership skills among them. It is a great pleasure to see the creative expressions of students who had contributed. This magazine has made an earnest attempt in this direction and brought out certain aspects of the college to the eyes of the public so that they may understand and know the college even better. I strongly believe that it would be an excellent medium through which the world can learn about the potential and achievements of TGPCET. I congratulate the members of the editorial board for their tireless efforts. Wishing the magazine, a lasting success!

FROM THE HEAD OF THE DEPARTMENT



I'm excited to introduce **"Byte Code"**, our department's magazine dedicated to bridging the gap between academics and industry. Through insightful guest lectures, engaging industrial visits, and inspiring alumni stories, Byte Code enriches students' learning experiences and connects theoretical concepts with real-world applications. Explore Byte Code to see how we bring industry expertise to the classroom and showcase our commitment to educational excellence. Discover our department's achievements and innovations in each issue!

Dr. Lowlesh Yadav
Head of Department
Computer science engineering



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —



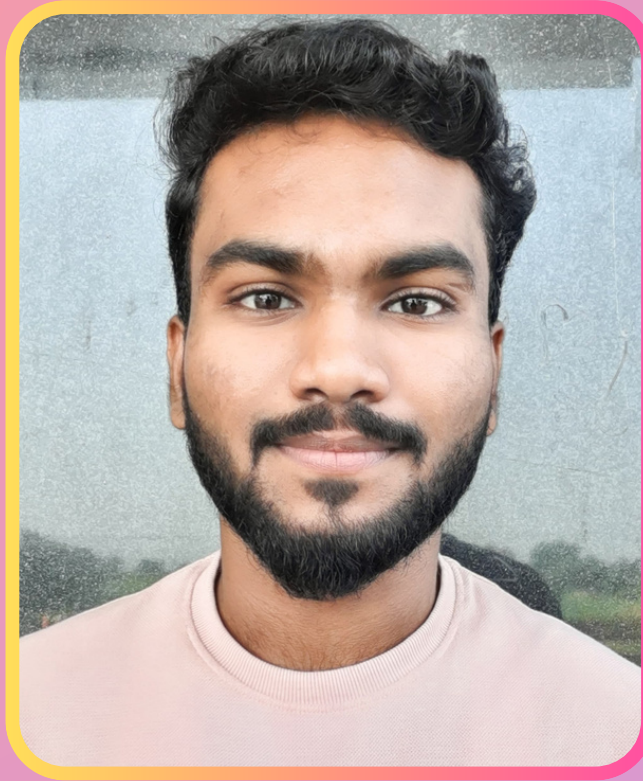
Editorial Board



Prof. Shubhkirti Bodkhe

Welcome to **Byte Code**, the magazine that brings you the latest from our department's vibrant community of students, faculty, and alumni! As the editor, I am thrilled to present this edition, packed with stories of innovation, excellence, and achievement. From industrial visits that take our students behind the scenes of cutting-edge companies, to guest lectures that bring industry experts to our campus, we have it all. Our publications section showcases the research and ideas that are shaping the future of technology, while our alumni stories inspire us with their journeys and accomplishments. I hope you enjoy reading Byte Code as much as we enjoyed creating it. Happy reading

Editorial Body



Mr. Aditya Thakre

Chief Editor

Branch: CSE (4th Sem)



Mr. Preet Gawali

**Branch: CSE (4th
Sem)**



Mr. Mahesh Wadhi

**Branch: CSE (4th
Sem)**



Mr. Piyush Narnaware

Branch: CSE (4th Sem)

Faculty



Prof. Ashvini Mahajan



Prof. Aditya Lavhale



**Prof. Bramhadev
Wadibhasme**



**Prof. Shubhkirti
Bodkhe**



Prof. Komal Naxine



Prof. Diksha Fulzele



Prof. Mrunali Jadhav



Prof. Jayant Adhikari



Prof. Anita Yadav



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151



NBA
NATIONAL BOARD
of ACCREDITATION



- 1. Teachers Articles**
- 2. Workshop on Python**
- 3. Paper Publication**
- 4. Rankers**
- 5. Placement**
- 6. Students Creativity**
- 7. Hackathon**
- 8. Awards**
- 9. Student Corner**

Teachers Articles



Prof. Ashvini Mahajan

Public key cryptography, introduced by Diffie and Hellman in 1976, uses a pair of keys—public and private—for secure communication. Unlike symmetric key cryptography, where the same key encrypts and decrypts data, public key cryptography allows the public key to be shared openly while the private key remains confidential. The RSA algorithm, developed in 1978 by Rivest, Shamir, and Adleman, further advanced this field by enabling secure data encryption and authentication through the complexity of factoring large numbers. Today, algorithms like Elliptic Curve Cryptography (ECC) offer efficiency with smaller key sizes. As quantum computing evolves, researchers are working on quantum-resistant algorithms to ensure future data security.



Prof. Jayant Adhikari

Hash tables are crucial data structures that offer efficient data retrieval and storage with average constant time complexity ($O(1)$) for operations like insertion, deletion, and search. They use a hash function to convert a key into an index in an array, determining where to store or retrieve the value.

Handling collisions—when different keys hash to the same index—is a key challenge. Two common methods are chaining, where collided elements are stored in a linked list at the index, and open addressing, which finds alternative slots using techniques like linear or quadratic probing.

Hash tables are widely used in applications such as database indexing, caching, and implementing associative arrays due to their ability to provide quick access and manage large datasets efficiently. Their versatility and performance make them indispensable in optimizing various computational tasks.



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151



NBA
NATIONAL BOARD
OF ACCREDITATION

Two Days Workshop on “Python For AI”

Name of Event: Two Days Workshop on “Python For AI”

Date of Event: 29th & 30th April 2024

Event Coordinator: Prof. Bramhadeo Wadibhasme

Aim of the Program:

The workshop aimed to equip third-year students with practical skills in Python programming and its applications in Artificial Intelligence (AI), fostering innovation and excellence in the field of technology

Program Details:

• Day 1:

- Introduction to Python: History, applications, and importance.
- Setting up Python environment: Installation and IDE setup.
- Basic Python commands and fundamentals: Syntax, variables, data types, operators, and control structures.
- Hands-on exercises: Writing and executing basic Python programs.
- Miniature game building: Overview of game development, creating a simple text-based game, implementing game logic, user input, decision making, testing, and debugging.

• Day 2:

- Introduction to Artificial Intelligence: Definition, history, types, applications, and importance.
- Creating AI voice assistants: Understanding Natural Language Processing (NLP), Text-to-Speech (TTS), and Speech-to-Text (STT) technologies.
- Building a simple voice assistant using Python: Integrating TTS and STT libraries, implementing basic commands and responses, testing, and refining.

Conclusion:

The Python for AI workshop, organized under the ISTE and CSI student chapters in collaboration with MSIT Services-CMS Nagpur, provided participants with a comprehensive learning experience. It equipped them with valuable skills and knowledge essential for AI development, reaffirming the commitment of the organizing bodies to fostering innovation and excellence in technology education.

Acknowledgement:

The organizers extend heartfelt gratitude to all workshop participants, facilitators, guest speakers, and collaborating partners for their invaluable contributions to the success of the workshop. Special thanks to Expert Swapnil Pande for sharing insights and expertise, enriching the learning experience for all participants. Additionally, gratitude is extended to MSIT Services-CMS Nagpur for their collaboration and support in organizing the event

Glimpses of Program:

Day 1:





NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151



NBA
NATIONAL BOARD
of ACCREDITATION

Day 2:





Paper Publication

Sr. no.	Name of Authors	Title of paper	Name of Journal	Volume No	Issue No	Public ation Year	ISSN/I SBN No
1	Shivali Tiwari shivalitiwari9@gmail.com Aditya Lavhale aditya.cse@tgpcet.com Jayant Adhikari jayant.cse@tgpcet.com Abhimanyu Dutonde abhimanyudutonde@gmail.com	Improving the Efficiency of Video Object Detection & Classification using BiLSTM with Recurrent Graph Convolutional Neural Networks	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
2	Pragati Patil viceprincipal@tgpcet.com Abhimanyu Dutonde abhimanyudutonde@gmail.com Heena Bharat Kachhela heena.kachhela@gmail.com Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com	Design and Implementation of Safety Robot System based on Controller	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
3	Abhimanyu Dutonde abhimanyudutonde@gmail.com Shubhkirti Salode shubhkirtibodkhe@gmail.com Jayant Adhikari jayant.cse@tgpcet.com Aditya Lavhale adityalavhale@gmail.com	Review on Environment Monitoring System with AI/ML Review Paper	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034
4	Jayant Adhikari jayant.cse@tgpcet.com Dhanshri Badole dhanshribadole1999@gmail.com Pragati Patil viceprincipal@tgpcet.com Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com	Detection & Analysis for Limitations of Ethernet Cable Connecting Multiple Computer Devices Inseries	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May-24	0971-3034



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL

College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151

5	Pragati Patil viceprincipal@tgpcet.com Prajakta Helonde prajaktahelonde1397@gmail.com Bramhadeo Wadibhasme bramhadeo.cse@tgpcet.com Abhimanyu Dutonde abhimanyudutonde@gmail.com	Advanced Firefighting and Alert System Innovation	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
6	Pragati Patil, Abhimanyu Dutonde, Trishali Dhote, Aditya Lavhale	Enhancing Data Analysis Efficiency: A DBSCAN- Apriori Fusion in Map Reduce	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
7	Abhimanyu Dutonde, Pragati Patil, Suraj Pawar, Ashwini Mahajan	Design of an Efficient Spiking Neural Networks based Proof of Transaction (PoT) Consensus for Improving Security of Banking Transactions	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034
8	Abhimanyu Dutonde, Pragati Patil, Monali Raut, Bramhadeo Wadibhasme	Enabling Seamless Interaction: A CNN-OpenCV Fusion Approach to Real-time Hand Gesture Recognition	IJTE (The Indian Journal of Technical Education)	Vol. 47	Special Issue No. 1	May- 24	0971- 3034



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —



Rankers

TOPPERS OF 3RD YEAR AUTONOMUS :

Ranks	Name of Student	Marks Out of 700	Percentage/ SGPA
1	Saurabh Tembhurne	624	9.33
2	Anushka Kamble	629	9.24
3	Pranab Mondal	624	9.19
	Saloni Sontakke	629	

TOPPERS OF 2ND YEAR AUTONOMUS :

Rank s	Name of Student	Marks Out of 700	Percentage/ SGPA
1	Rupesh Mutkule	639	9.79
2	Shejal Burele	635	9.75
3	Sheetan Khamankar	629	9.71



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & TechnologyDTE
CODE
4151**NBA**
NATIONAL BOARD
of ACCREDITATION**TOPPERS OF 1ST YEAR AUTONOMUS SECTION A :**

Ranks	Name of Student	Marks Out of 650	Percentage/ SGPA
1	Astha Nikhare	573	8.8
2	Harshal Waghmare	568	8.7
3	Bhoomi Bodele	566	8.5

TOPPERS OF 1ST YEAR AUTONOMUS SECTION B :

Ranks	Name of Student	Marks Out of 650	Percentage/ SGPA
1	Sanjana Paul	579	8.9
2	Yamini Bhese	571	8.7
3	Preet Gawali	569	8.5



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & TechnologyDTE
CODE
4151**NBA**
NATIONAL BOARD
OF ACCREDITATION

— An Autonomous Institute —

Certificate



NPTEL Online Certification
(Funded by the MoE, Govt. of India)



This certificate is awarded to
ASHWINI MHAJAN
for successfully completing the course
Social Networks

with a consolidated score of **49** %

Online Assignments	18.69/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: 2383


Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

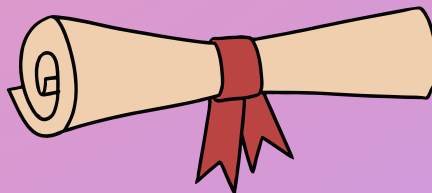
Jan-Apr 2024
(12 week course)


Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

 Indian Institute of Technology Madras



Roll No: NPTEL24CS56S1262901605 To verify the certificate  No. of credits recommended: 3 or 4





Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)


Skill India
कौशल भारत - कुशल भारत



This certificate is awarded to
SHUBHKIRTI SALODE
for successfully completing the course
Cloud Computing

with a consolidated score of **64** %

Online Assignments	22.35/25	Proctored Exam	41.67/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: 30816

Jul-Oct 2024
(12 week course)


Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

 Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS118S953100419 To verify the certificate  No. of credits recommended: 3 or 4



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —



PLACEMENTS



Mr. Varis Rana

Computer Science & Engineering

Selected In:
parchaa

Package:
11 LPA



Ms. Fareen Ansari

Computer Science & Engineering

Selected In:
 Corizo Edutech, Bangaluru

Package:
6.25 LPA



Mr. Novhel Rahangdale

Computer Science & Engineering

Selected In:
 Acme grade Pvt. Ltd. Bangaluru

Package:
6 LPA



NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

DTE
CODE
4151



NBA
NATIONAL BOARD
of ACCREDITATION

— An Autonomous Institute —



Ms. Aditi Anasane
(Branch: CSE)



Mr. Chaitanya Yesambare
(Branch: CSE)



Ms. Amisha Uikey
(Branch: CSE)



Ms. Purva Chahande
(Branch: CSE)



Ms. Sonali Chavhan
(Branch: CSE)



NAAC Accredited

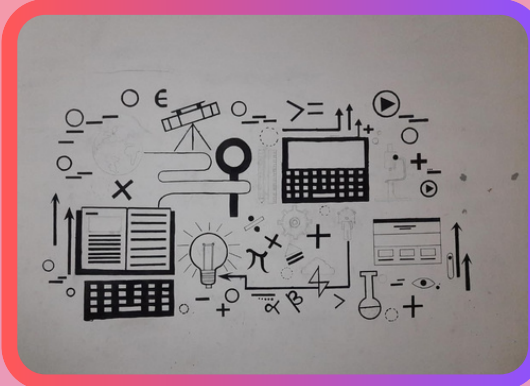
Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

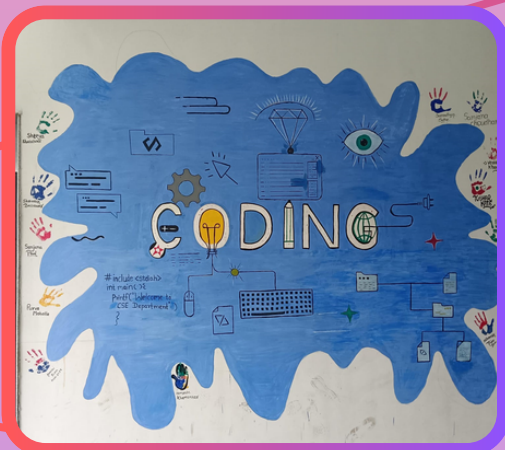
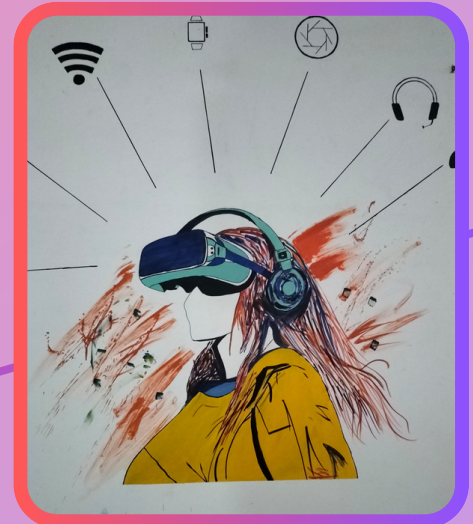


Students Creativity



Wall Painting created by -
Aditya Thakre
Mahesh Wadhi
Piyush Narnaware

Wall Painting created by -
Prathmesh Wasnik
Nishant Badole
Isha
Annya
Manasvi



Wall Painting created by -
Namrata khamankar, Sanjana Choudhari
Sanjana paul, Shreya shatlwar
Yamini bisen, Vedant kharabe
Shrenik tajne, Purva mahalle

Wall Painting created by -
Vaibhav Nargale
Om Charode
Rohit rathi





NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL

College of Engineering & Technology

— An Autonomous Institute —



Time Watch

Project created from waste by -

Aditya Thakre

Raju Racha

Mahesh Wadhi

Project created from waste by -

Tushar Kate

Tanmay khumbhakar

Vallabh Shingroop

Vedant kharabe

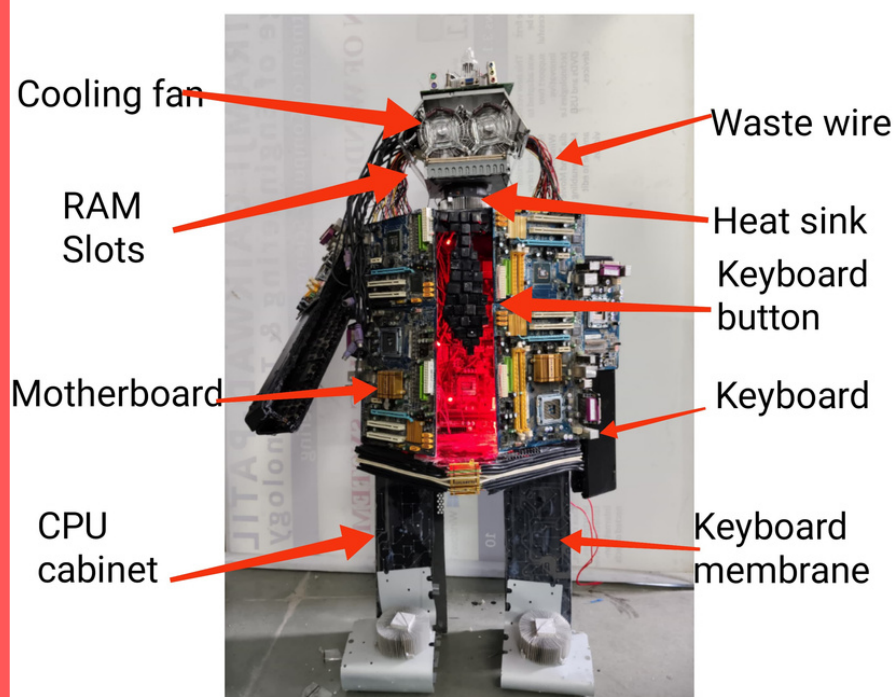
Vinayak gavli

Vrushabh raut

Vivek

Sahil

Techno Bot





NAAC Accredited

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

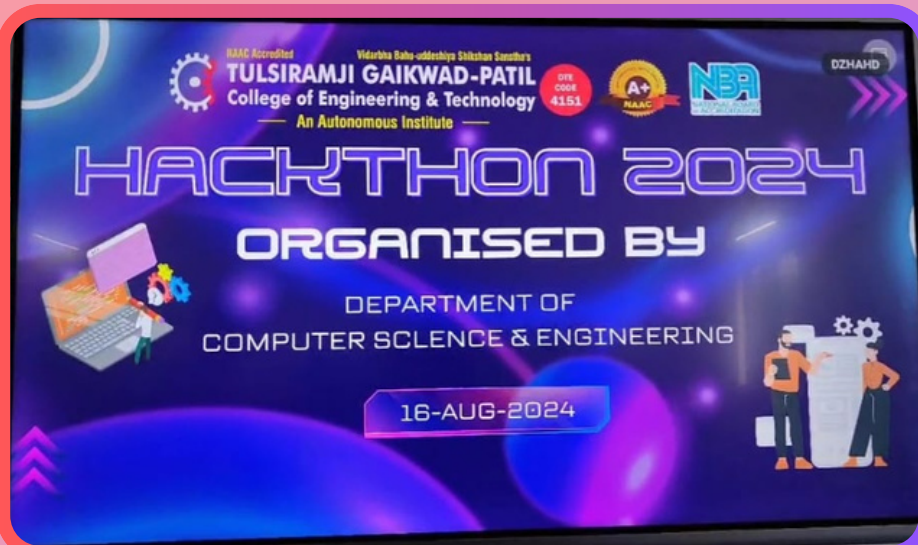
TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

DTE
CODE
4151



NBA
NATIONAL BOARD
of ACCREDITATION



Hackathon

2024



CSE



NAAC Accredited

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

— An Autonomous Institute —

Vidarbha Bahu-uddeshiya Shikshan Sanstha's

DTE
CODE
4151

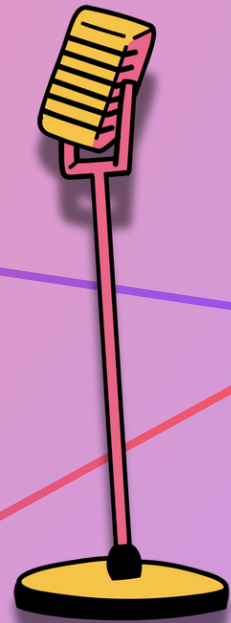


NBA
NATIONAL BOARD
OF ACCREDITATION

Student Awards



Om Charode (Singing)



Mr. & Mrs. Fresher's

Student Corner

The Power of Tech Businesses

Tech businesses are revolutionizing the world by solving real problems with innovative solutions. From AI tools to e-commerce platforms, they thrive on rapid growth and global reach. Key sectors like fintech, edtech, and green tech offer immense opportunities for aspiring entrepreneurs.

The rise of remote work and digital connectivity has further boosted the demand for tech solutions. Businesses are adopting cloud technologies, AI-driven analytics, and automation to streamline operations and enhance productivity. This shift has opened doors for new startups to deliver specialized tools tailored to niche markets.

Moreover, consumer preferences are rapidly evolving, with a focus on convenience, personalization, and sustainability. Tech companies that prioritize user experience and ethical practices are gaining a competitive edge. With innovation driving every industry, the potential for impact and growth in the tech business space is limitless.

However, challenges like cybersecurity and competition require a focus on innovation and trust. With technology shaping the future, tech businesses remain at the forefront of economic and social transformation.

- By Aditya D. Thakre