

NEWSLETTER

DEPARTMENT OF INFORMATION TECHNOLOGY GOVERNMENT POLYTECHNIC, MUMBAI

(An Autonomous Institute of Government of Maharashtra)

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--> Our Vision (GPM)
Transform knowledge into work

--> Our Mission (GPM)

We are committed for:

- Quality education for lifelong learning.
- Need based educational programmes through different modes.
- Outcome based curriculum implementation.
- Development and upgradation of standard laboratory practices.
- Promoting entrepreneurial programmes.

PREFACE

This newsletter aims to highlight the various achievements of the Department of Information Technology accomplished during the even term of the academic year 2022- 2023. It encompasses keynote address from esteemed Principal and Head of the Department. The newsletter sheds light and offers a glimpse on the activities and accomplishments of the students of Information Technology Department. In addition, it provides insight regarding the achievements of the faculty as well as the various activities undertaken by the department throughout the academic year. It is our genuine hope that this newsletter serves as encouragement to the students and serves to be informational to parents, well-wishers and other stakeholders. Presenting this newsletter is a matter of pride for the Information Technology Department and we openly invite all readers to provide their valuable feedback and suggestions.

Vision, Mission of GOVERNMENT POLYTECHNIC, MUMBAI

We believe in ethical, safety, environment friendly practices and teaching learning innovations.



VISION (IT DEPT.)

Information technology department aims to

--> Develop IT professionals to solve real life problems.

MISSION (IT DEPT.)

Information technology department is committed to:

- Offer need based quality education for lifelong learning.
- Continuous upgradation of curriculum and laboratories through industry institute interaction.
- Conduct short term programmes to serve society.
- Develop entrepreneurial capabilities.
- Imbibe social awareness and responsibility in students to serve the society and protect the environment
- Make the students industry ready to enhance their employability in the industries.





PRINCIPAL'S KEYNOTE ADDRESS



Dear students, faculty members, staff, and readers,

I am pleased to address you all through this newsletter as we celebrate the remarkable accomplishments of our Information Technology Department at our prestigious polytechnic college. It is with great pleasure that I share my thoughts on the expanding realm of technology and its profound impact on our lives. At our college, we foster a dynamic and forward-thinking learning environment that empowers our students to become the next generation of tech pioneers. Through our rigorous curriculum, state-of-the-art facilities, and dedicated faculty, our students are equipped with the knowledge, skills, and mindset necessary to excel in this field.

As we navigate the digital landscape, it is essential for us to embrace innovation while upholding ethical considerations and responsible practices. Our IT Department not only instills technical expertise but also emphasizes the importance of ethical decision-making, cybersecurity, and privacy protection. We aim to cultivate well-rounded professionals who excel in their technical prowess and demonstrate a strong commitment to integrity, teamwork, and societal impact.

Collaboration is key to driving meaningful progress, and our department actively fosters partnerships with industry leaders, research institutions, and community organizations to provide students with real-world experiences and opportunities for cutting-edge research. These collaborations enrich our students' education and contribute to the advancement of knowledge and betterment of society. As we move forward, our IT Department remains committed to staying at the forefront of technological advancements, continuously adapting our curriculum to meet the evolving needs of the industry.

To our students, I encourage you to embrace curiosity, tenacity, and creativity as you embark on this exciting journey. To our faculty members and staff, I extend gratitude for your unwavering dedication and commitment to excellence. Let us celebrate the achievements of our IT Department and recognize the great potential it holds for society.

Thank you, and I wish you all continued success and fulfillment in your endeavors.

Warm regards,

Dr. Nitiket N. Mhala

Principal [Government Polytechnic Mumbai]

HOD'S KEYNOTE ADDRESS



From The Desk of the Head of Department....

Dear Colleagues and Students,

It gives us pleasure and honor to bring out the issue of newsletter of Department of Information Technology department, Government Polytechnic Mumbai for the period from January, 2023 to June, 2023.

In this newsletter we publish all the important events, activities of the students, faculty, and staff. We would like to thank all contributors including faculty, staff members and students for their valuable inputs. I must congratulate faculty members and students for participating in various technical events.

I just want to take this opportunity to thank you for your understanding and calm, positive approach. I believe in working hard to foster a culture that is always focused on doing what is best for students and ensuring that they have a positive educational experience that will impact them for a lifetime. I am extremely appreciative of our students, teachers, staff, and administrators for their positivity, flexibility and resilience.

This semester we conducted have conducted various expert lectures for our students. Some of our faculty have also shared there expertize in the form of expert lectures, State level Technical Paper Scrutiny member and experts for FDP. We seek full cooperation and support from all the students, faculty and staff members.

We believe in continual improvement and publishing the newsletter gives a chance to introspect as to how close we are towards achievement of our goals.

Let us endure to strive and achieve our Vision and Mission.

Dr. Hemant Pardeshi, Head Department of Information Technology

THE POWER OF BLOCKCHAIN: REVOLUTIONIZING TRUST & SECURITY

--- By Sree Latha Kommugury, Lecturer in IT. Compiled from various reliable sources.

In recent years, blockchain technology has emerged as a transformative force across industries, promising to revolutionize the way we store, share, and verify information. Originally developed as the underlying technology for cryptocurrencies like Bitcoin, blockchain has evolved into a powerful tool with immense potential for reshaping various sectors. Its decentralized, transparent, and immutable nature has garnered widespread attention, offering unprecedented opportunities for businesses, governments, and individuals alike. This article explores the fundamental concepts of blockchain and its potential impact on our society.

UNDERSTANDING BLOCKCHAIN:

At its core, blockchain is a distributed ledger technology that enables the secure and transparent recording of transactions and information. Unlike traditional centralized systems, where data is stored on a single server or controlled by a central authority, blockchain operates on a network of computers, known as nodes, which collectively maintain and validate the data. Each transaction or data entry, called a "block," is linked to the previous one in a chronological and cryptographic manner, forming a chain of blocks, hence the name "blockchain."

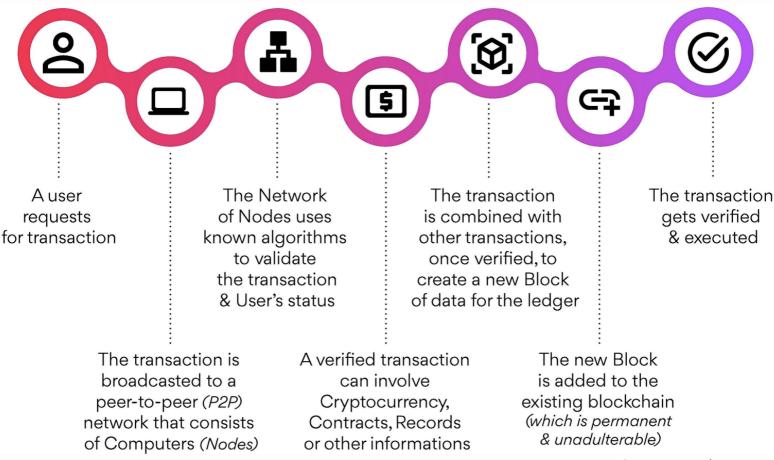


Image Source: Turing.com

THE POWER OF BLOCKCHAIN: REVOLUTIONIZING TRUST AND SECURITY

Key Features & Benefits:

1. Decentralization: Blockchain eliminates the need for intermediaries, such as banks, by establishing a decentralized network. This peerto-peer architecture empowers participants to interact directly, reduce costs, and increase efficiency without relying on a central authority.



2. Transparency and Immutability: Every transaction recorded on the blockchain is visible to all participants, ensuring transparency and accountability. Once a block is added to the chain, it becomes nearly impossible to alter previous records, enhancing data integrity and security.

3. Security and Trust: Blockchain employs advanced cryptographic algorithms to secure data and transactions. By distributing data across multiple nodes and using consensus mechanisms like proof-of-work or proof-of-stake, blockchain ensures that records are highly resistant to hacking and fraudulent activities, enhancing trust in the system.

Applications across Industries:

- **1. Financial Services:** Blockchain has the potential to revolutionize traditional financial systems by enabling faster, more secure, and cost-effective transactions. It facilitates cross-border payments, simplifies remittances, and streamlines the settlement process. Smart contracts, self executing agreements stored on the blockchain, eliminate the need for intermediaries, making financial operations more efficient.
- **2. Supply Chain Management:** The transparency and traceability offered by blockchain are invaluable in supply chain management. It allows businesses to track and verify every stage of a product's journey, from raw materials to the end consumer. This technology enables greater visibility, reduces fraud, enhances quality control, and supports sustainability efforts.
- **3. Healthcare:** Blockchain can revolutionize the healthcare sector by securely storing and sharing patient records, ensuring interoperability, and improving data security. It enables efficient management of pharmaceutical supply chains, reduces counterfeit medications, and enhances clinical trial transparency.
- **4. Government Services:** Governments are exploring blockchain for various applications, such as land registry systems, voting platforms, and identity verification. The decentralized nature of blockchain enhances security, prevents fraud, and increases transparency in public services.

Conclusion:

Blockchain technology holds immense promise for transforming our society by redefining how we establish trust, share information, and conduct transactions. Its decentralized nature, combined with features like transparency, security, and immutability, opens up new avenues for innovation across industries. While there are still technical and regulatory challenges to overcome, the potential benefits of blockchain make it an exciting and disruptive force that will shape our future.

ACHIEVEMENTS OF STUDENTS

ACADEMICS | SPORTS | OTHER COMPETITIONS

ACADEMICS

The results of the odd semester 2023 (GPM) were published in this semester duration. Toppers of the IT department from first, second & third year- first shift and second shift are displayed below.

Third Year (First Shift, 5'th Semester)



Miraj Lakeshri-96.5%

Ajit Yadav-96.3%

Third Year (Second Shift, 5'th Semester)



Chinmayee Avinah Deshmukh-94.62%



Mustansir Shabbir Rangwala-94.38%

Second Year (First Shift, 3'rd Semester)



Shivraj Santosh Kolwankar- 94.85%



Dipesh Rajendra Chavan- 92.42%

Second Year (Second Shift, 3'rd Semester)



Ghadge Prathmesh Jalinder- 92.00%



Saina Abdul Hamid- 91.71%

First Year (First Shift, 1'st semester)



Kaustabh Mondal – 91.88%



Shruti Misal-91.66%

First Year (Second Shift, 1'st semester)



Shruti Rajendra Suryavanshi- 91.00%



Dyanesh Sunil Chaudhari – 90.00%

GPORTS



Muzammil Ansari Daud
Ali, a first year second
shift student, from the
Information Technology
Department,
participated in the
National Open Amateur
MMA Championship and
secured a gold medal in
the 52.2 weight category.
He will be taking part in
another national
championship in
Banglore in October
2023.

Muzammil receiving gold medal in kickboxing.

The following students from IT Department have participated in the sports conducted by the college under **Inter Engineering Diploma Students Sports Association** (IEDSSA). Maharashtra State.

Akshita Meher from second year second shift participated in Kabaddi, **Rupali Marsale** (SYSS), **Harsh Atkari** (SYSS), **Aniket Bedwal** (FYFS), **Prisha Raut**(SYFS), **Shruti Gayakar**(SYFS) participated in khokho inter college zonal TOURNAMENT 2022-23.

The Boys team won the Runner-up Trophy in kho-kho for the college.

Images are displayed on the next page...



College girls Kho-Kho team including Students of Information Technology

Boys Kho-Kho team stood as Runner-up in the intercollege zonal Tournament. **Aniket Bedwal**, First year first shift, and **Harsh Atkari**, Second year first shift are students of IT Department in the team.





Manthan Garade, Second year second shift, and Dnyanesh Chaudhari, First year second shift, participated in Cricket competition.

ACHIEVEMENTS IN OTHER COMPETITIONS



Shivraj Kolwankar, Dipesh Chavan, Yash Mulik and Yash Aghane.

Team name:- ByteDevs

Participated in Hackathon **HACK-STOMP** held on 31st March & 1st April which is organized by **Universal College of Engineering**, **Vasai**.



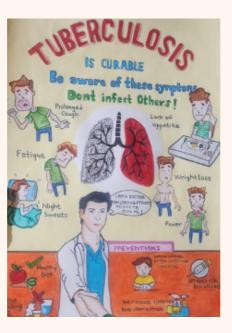
Shivraj Kolwankar and **Dipesh Chavan**, **Winners of MindFizz** of the **State Level** Technical Event **TECHNOW-2023** Organized by Department of Computer Engineering, Government Polytechnic Mumbai.

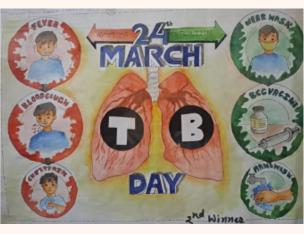
ACHIEVEMENTS CONTD...

Pranjal Mahajan participated in Poster making competition (state level) **Technical Event TECHNOW -2023** Organized by Department of Computer Engineering, Government Polytechnic Mumbai.



Dicholkar Akshata Anil first year second shift and Kasar Shravan Sunil first year second shift stood first and second respectivily in poster making competition organised by Public Health Department, Maharashtra Government on world TB Day on 24th March 2023.





- Suryawanshi Shruti Rajendra from first year second shift has stood second in Essay writing competition on organised by National Service Scheme (NSS) for the topic "Challenges faced by the farmers in Maharasthra" on the ocassion of Maharashtra Day.
- Amar Vasudhev Jadhav completed the Nasha Mukt Bharat Abhiyaan Quiz organized by the Ministry of Social Justice and Empowerment.
- Mayur Palve participated in webinar of Python Development at CodeClause

ACHIEVEMENTS OF FACULTY

 Dr. Hemant Pardeshi, HOD, has conducted a session on Criteria-9, Governance, Institutional Support, and Financial Resources on MSBTE sponsored FDP "NBA Accreditation Process and Evaluation" which was conducted on 25/4/2023.





- Dr. Hemant Pardeshi, HOD, took part as a Scrutiny Committee Member in MSBTE sponsored State Level Technical Paper presentation Competition 2023, organized by Vidyalankar Polytechnic College, Mumbai
- Dr. Hemant Pardeshi, HOD, conducted an expert lecture of "Future of Semiconducter Industry" on 4'th March 2023 at Vidhyalankar Polytechnic College, Mumbai
- Dr. Hemant Pardeshi, HOD, has participated in one week National Level Faculty
 Development Programme (FDP) on "Relevance of Blockchain and the Applications
 in Current Trends" conducted by IEEE Computer Society, Pune from 24th to 28th
 April 2023 organized by Vishwakarma Institute of Information Technology, Pune.

FACULTY ACHIEVEMENTS CONTD...

- Mrs. Sreelatha Kommugury, Mrs.Namrata Wankhede, Mrs. Dipali Gosavi, Lecturers in IT Department, have participated in one week National Level FDP on "Relevance of Blockchain and the Applications in Current Trends" conducted by IEEE Computer Society, Pune from 24th to 28th April 2023 organized by Vishwakarma Institute of Information Technology, Pune.
- Mrs. Sreelatha Kommugury delivered a Lecture on patriotism and women empowerment to the students of St. Xavier's college and other women at Byculla organized by Y.W.C.A, on January 26, 2023.





Our visiting Faculty Mrs.Swapna Chavan and Mrs. Subhangi Meshram are pursuing
 M.Tech degree from University of Mumbai.

ACTIVITIES OF IT DEPARTMENT

INPLANT TRAINING | INDUSTRIAL VISIT | PARENT-TEACHER MEETING | GUEST LECTURES

IN-PLANT TRAINING

In every academic year, the third year students of Government Polytechnic Mumbai mandatorily attend in-plant training in the final semester. The main aim of in-plant training is to increase the employability skills of students passing out from the institute. For getting real time exposure of industrial environment six-month long in-plant training is incorporated. The outcomes of the training is a step ahead in making students employment ready and augment various attributes in students.



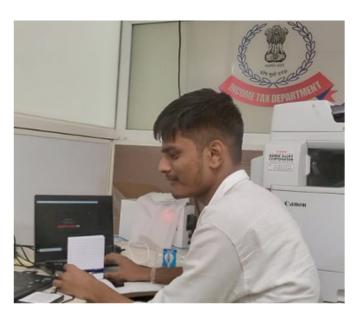
IT Dept. Students working with Gofirst airline.



Students working at Darsh Infotech Pvt. Ltd., Mumbai



Students of IT Department at University Grade Stock Market Exchange.



Our Student working with Income Tax Department, Govt of India

INDUSTRIAL VISIT

Department of Information Technology has organized a visit to Industry C-DAC (Centre for Development of Advanced Computing), Mohali, Chandigarh on 3rd March 2023.

C-DAC is primarily an R&D institution involved in the design, development and deployment of advanced Information Technology based solutions. C-DAC Mohali has been at the forefront of design and development of technologically advanced products and solutions in thematic areas of Health Informatics, Cyber Security, Software Technologies, e-Governance application development, Artificial Intelligence, Human Centered Design, Immersive technologies including AR/VR, Robotics & Smart Systems and Agri-Electronics.

50 students from the second year of IT and staff -- Mrs. Namrata Wankhede and Mrs. Dipali Gosavi, Lecturers in IT, along with Mr. Jayant Padte and Mr. Pravin Yadav, Lab Assistants -- participated in the Industrial Visit. They gained insights on software industries and computing by attending presentations regarding CDAC work, current projects and carrier opportunities in Digital marketing. Various government projects and setups were also displayed.





PARENT- TEACHER MEETING

The parent teacher meeting was held on 1st April, 2023 for the first, second, and third-year students. Many parents were in attendance. They were made aware of the Department activities during the semester. The students' attendance and their unit test marks were displayed, as well as, the performance of students, curriculum-related topics, in-plant training, industrial visit, etc were discussed with the parents by HOD and faculty.





These images depict
the Parent-Teacher
meeting that was held
to foster collaboration
between the two
parties in order to
provide our students
the best support in
their academic and
personal development.

GUEST LECTURES

--> CAREER OPPORTUNITIES FOR POLYTECHNIC STUDENTS

Guest Lecture was organized by Mrs. Sreelatha Kommugury, lecturer in IT Department, on "Career Opportunities for Polytechnic Students" by Mr. Nitin Wadekar, Deputy Commissioner, Cabinet Secretariat, Government of India on 10th February, 2023.

Mr. Nitin Wadekar, a former student of a Government Polytechnic, is presently holding an important position in Government of India and contributing to national security.



He explained to our students about career opportunities in the public sector and encouraged them to take up government jobs that are contributing to the nation building. He also explained to the students about career opportunities in the private sector viz telecom, IT, Mechanical, aviation, etc and encouraged students to aim for becoming successful entrepreneurs, thereby providing jobs to the deserving candidates.

Mr. Nitin Wadekar also deliberated upon the emerging technologies and opportunities for diploma holders and encouraged students to learn about the latest technological developments. Students along with faculty members attended the lecture which was chaired by Principal Dr. Nitiket. N. Mahla.



--> PYTHON PROGRAMMING

Guest Lectures organized by Mrs. Dipali Gosavi on "<u>Python</u> <u>Programming</u>" on 1st April 2023 by <u>Mr. Mahesh Ghadge</u>, Project Manager, Infosys.

Mr. Mahesh Ghadge gave a brief introduction about IT industry evolution and different programming languages developed since evolution.



Additionally, he explained about the importance of Python Programming in present IT industries and different applications of Python Programming especially in data sciences. Mr. Mahesh Ghadge explained the it by giving demo of live Amazon application.

