

Shikhar

2021

INCEPTION OF PEDESTAL

Rising After Hard Times



Technocrats Institute of Technology (Excellence)

ANAND NAGAR, BHEL, BHOPAL | website : www.titexcellence.net

Estd. : 1999



“Highest Placement & Academic Excellence Leader in Central India Award - 2019” Awarded by Shri Kamal Nath ji, Hon’ble Chief Minister of M.P.



श्री मंगुभाई पटेल

मैं आपकी मेहनत और अभिव्यक्ति की प्रशंसा करता हूँ।
राज्यपाल के रूप में, मैं आपके माध्यम से छात्रों की
समस्याओं और आवाज को समर्थन देता हूँ। आपका उत्साह
और रचनात्मकता की प्रशंसा की जाती है, और मैं आपको
धीरज देता हूँ कि आप कॉलेज समुदाय में अभिव्यक्ति और
रचनात्मकता की भावना को बढ़ाते रहें।

कॉलेज मैगज़ीन की सफलता के लिए शुभकामनाएँ देता हूँ
और सभी छात्रों के उज्वल भविष्य की कामना करता हूँ।

श्री मंगुभाई पटेल



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



VICE CHANCELLOR'S MESSAGE

It gives me immense pleasure to know that Technocrats Institute of Technology (Excellence) is going to publish its annual magazine 'Shikhar-2022'.

Students need academic exposure during their formative years. The institutional magazine provides the student community to exhibit their innovative and creative abilities as also to highlight the achievements of the institute.

I hope that the annual magazine being brought out by the Institute will provide a meaningful window to the competence and calibre of the students.

I am sure the budding engineers studying at the Institute are being equipped with the necessary knowledge and skills to enable them to work as global engineers in today's highly competitive work environment.

I extend my very best wishes for the publication.

Prof. Sunil Kumar



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

CHAIRPERSON'S MESSAGE

“Educating the mind without educating the heart is no education at all.”

As we embark on another academic year, I wanted to take a moment to share my thoughts with you through the pages of our college magazine. As the Chairperson of our esteemed institution, I am proud of the strides we have made in providing high-quality education to our students.

We are committed to fostering an environment that encourages learning and growth, and our faculty members are dedicated to helping our students achieve their full potential. Our state-of-the-art infrastructure and well-equipped laboratories provide our students with ample opportunities for practical learning and hands-on experience.

Our college is also committed to promoting research and innovation, and we encourage our students to participate in various research projects and activities. We believe that these experiences will prepare our students for the challenges of the future and equip them with the skills and knowledge they need to make a difference in the world.

I wish you all the best for the upcoming academic year and look forward to seeing you achieve great success.

Chairperson



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

VICE CHAIRMAN'S MESSAGE

“Success comes to those who work hard and stays with those, who don't rest on the laurels of the past.”

It is my pleasure to welcome you all to this year's college magazine. As the Vice Chairman of our esteemed institution, I take great pride in the hard work and dedication displayed by our students and faculty.

'**SHIKHAR**' has been consistently effective in identifying talented aspiring authors and nurturing their skills, inspiring creativity and fueling their passion to read and create. It prioritizes innovation, vision, and creativity over hard news, allowing students to develop their writing and reporting abilities.

In today's media-driven culture, these principles are more relevant than ever. I urge students to network and observe, making

Vice Chairman



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

MANAGING DIRECTOR'S MESSAGE

"Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

A strong foundation in education is essential for success and happiness, not just for individuals but also for building a successful nation. It is through education that individuals can achieve their goals and fulfill their missions to lead contented lives. At TITE, we believe that education is the most significant service that one can provide to society.

With a focus on excellence, determination, and a dedicated faculty, TITE has established itself as a prominent institution in the field of education. Our meticulously designed curriculum, state-of-the-art infrastructure, and commitment to student success have helped us create a culture of achievement. Our goal is to equip every TITE student with the knowledge, skills, and confidence needed to navigate the complexities of life beyond their studies. We strive to provide the best creative and technical education while also instilling important human qualities that will serve them well in their personal and professional lives.

At TITE, we are passionate about education and its power to transform lives. We are dedicated to creating a learning environment that inspires students to reach their full potential, both as individuals and as contributors to society.

Managing Director



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



DIRECTOR'S MESSAGE

**"OUR DREAMS HAVE TO BE BIGGER, OUR AMBITIONS SOARING HIGH,
OUR COMMITMENT SHOULD BE DEEPER, AND OUR EFFORTS TO TOUCH THE SKY."**

We live in the digital age, where the potential of technology should be harnessed to impart knowledge. Our educational institution's primary objective is to instill students with genuine human and spiritual values, along with academic excellence and all-round personality development, enabling them to perform well in any situation. Technocrats Institute of Technology (Excellence) strives to produce diligent and committed professionals who serve humanity. We provide ample opportunities for research, sports, cultural, and extracurricular activities, enabling students to realize their full potential. Our focus on facilitating education for the next generation has earned us the trust of society, and we have achieved remarkable placements for our students. We wish all our students success in their endeavors.

Prof. (Dr.) K.K. Dwivedi



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

ADDITIONAL DIRECTOR'S MESSAGE

"You don't have to be great to start, but you have to start to be great"

Technology has revolutionized the Indian education system, providing students with improved learning opportunities and increased engagement. As a member of this family, I am privileged to Technology has revolutionized the Indian education system, work with a dedicated, innovative, and caring staff, alongside curious young minds eager to learn new things.

As educators, we face the challenge of meeting our students' expectations and nurturing their natural curiosity. We constantly update ourselves to keep pace with ever-changing trends and provide the best possible learning environment for our students..

At TIT-E, we value mutual respect between teachers and students, recognizing that this is where powerful learning takes place. With the support of parents, we strive to create an environment that enables our students to realize their dreams and contribute towards building a healthy society. We understand that every student is precious and has the potential to make a positive impact on society. Our goal is to guide them towards the right path and empower them with the necessary tools to achieve their dreams. At TIT-E we believe that by investing in our students' education, we are investing in the future of our nation.

Dr. Ramakanta Sahoo



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



CHIEF EDITOR'S MESSAGE

It is with great pleasure that I welcome you to the latest edition of our college magazine. As the Chief Editor, I am proud to have been a part of this publication that showcases the creativity, talent, and voices of our student community.

I would like to express my sincere appreciation to all the contributors who have made this magazine possible. Your hard work, dedication, and passion for your respective areas of interest are evident in the quality of the articles, poetry, artwork, and photography that we have included in this edition.

As students, we have a unique perspective on the world around us, and this magazine provides us with a platform to express our ideas, opinions, and concerns. It is our hope that this publication will continue to be a source of inspiration and a reflection of our collective aspirations.

Thank you once again to everyone involved in bringing this magazine to fruition. I hope you all enjoy reading it as much as we enjoyed creating it.

Prof. Rashmi Kaushik
Chief Editor



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



STUDENT CHIEF EDITOR'S MESSAGE

It is with great pleasure that I introduce you to this year's annual college magazine. As the chief student editor, I have had the privilege of working alongside an incredibly talented and dedicated team to bring you a publication that showcases the very best of our college.

We have worked tirelessly to ensure that every aspect of the magazine reflects the highest standards of journalism and design. Our team of writers, photographers, and designers has gone above and beyond to produce content that is both engaging and informative, and I am proud to say that this year's magazine is truly exceptional.

I would like to extend my gratitude to all the contributors, photographers, and designers who have helped bring this publication to life. Without their hard work and dedication, none of this would have been possible.

I invite you to sit back, relax, and enjoy the fruits of our labour. This magazine is a testament to the talent and creativity of our community, and I hope that it will inspire you as much as it has inspired us.

Apurbi Shreya
Chief Editor
Student Editorial Board



Inception of Pedestal:” Rising After Hard Times”

The inception of Pedestal, the renowned literary magazine, is a fascinating tale of passion and perseverance. It all started in the early 2000s, when a group of enthusiastic writers and literature enthusiasts felt the need for a platform to showcase and celebrate their creative works. They felt that there was a lack of recognition for emerging writers and poets, and wanted to create a space where they could share their work with a wider audience. Thus, Pedestal was born - a literary magazine that would publish works of fiction, poetry, and essays from both established and emerging writers.



The team behind Pedestal was a diverse group of individuals, each with their own unique skill set and area of expertise. They all shared a love for literature and a passion for promoting new voices in the literary world.

Pedestal, the renowned literary magazine, has become a symbol of perseverance and dedication in the world of literature. Its inception is a tale of passion and hard work, with a group of enthusiastic writers and literature enthusiasts coming together to create a platform for emerging writers and poets. Despite facing initial challenges, Pedestal rose from the ashes and became a respected publication in the literary world. Its commitment to quality and diversity has made it a go-to platform for emerging voices in the literary world. In this article, we will explore the inception of Pedestal and the challenges that it faced in its early days, highlighting how it overcame them to become the success it is today.

Today, Pedestal is recognized as one of the leading literary magazines in the world. It continues to publish works of exceptional quality and has become a go-to platform for emerging writers and poets.

In conclusion, the inception of Pedestal is a testament to the power of passion and perseverance. The team behind the magazine's creation saw a need for a platform to celebrate emerging voices in the literary world and worked tirelessly to make that vision a reality. Pedestal's success is a tribute to their dedication and commitment to quality.



Editorial Board

Advisory Board:

- *Prof. Ravindra Gautam*

Chief Editor:

- *Prof. Rashmi Kaushik*

Editors:

- *Dr. Jitendra Singh Mathur*
- *Dr. Adarsh Sachdeva*
- *Soham Bharti, CSE- VI SEM*
- *Dr. Rachna Kamble*
- *Prof. Sujata Sharma*
- *Prof. Neha Shrivastava*
- *Prof. Neha Singh*
- *Prof. Manish Choube*

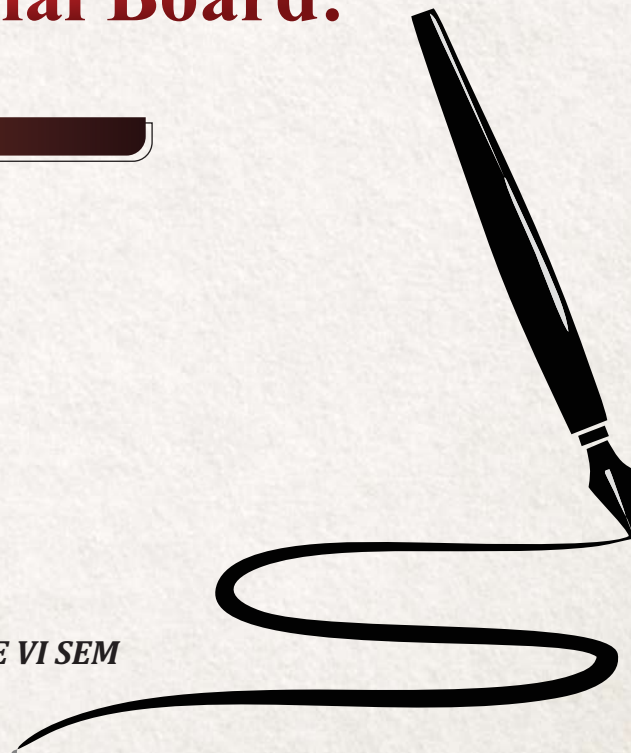
Designer:

- *Ms. Ritu Pawar*

Student Editorial Board:

Editors:

- *Isha Thakur CSE IVSEM*
- *Harshita Sahu CSE IV SEM*
- *Himanshu Jain CSE IV SEM*
- *Pragya Sable CSE IV SEM*
- *Anshul Rai CSE IV SEM*
- *Ashwin Khasdev CSE IV SEM*
- *Bhawna Sen CSE VI SEM*
- *ANKIT RAJ CSE VI SEM*
- *Akashay Wafade CSE VI SEM*
- *Maneesh Kumar Kushwaha CSE VI SEM*





Editorial Board





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TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

Department Of Computer Science Engineering

The Computer Science & Engineering Department began in 2007, accepting 60 students initially, but as the demand for computer professionals grew, the management proposed an increase in the intake, and with AICTE approval, it increased to 180 students. The department has advanced computer systems, multimedia kits, and 24x7 internet, with nine labs for OOPS/DSA, ADA, RDBMS, and more. The students are encouraged to undertake research activities, and

Dr. Yogadhar Pandey
CSE (HOD)



DAZZLING STARS

Academic Year 2021- 2025

Final Year

Hirdesh Baghel
Topper

Ankit Raj
2nd Rank

Bhavna Sen
3rd Rank

Third Year

RAJESH
Topper

Nehali Sujoriya
2nd Rank

Chansi Bhadouria
3rd Rank

Second Year

Ritika Panjwani
Topper

Shruti Agarwal
2nd Rank

Shrusti Vaidya
3rd Rank

First Year

ATUL GUPTA
Topper

DEEKSHANT SURYAWANSHI
2nd Rank

NAVEEN KUMAR
3rd Rank



Department of Computer Science Engineering

Vision of the Department

To produce technically and ethically competent, socially responsible and innovative Computer Science & Engineering professionals through quality education, who can contribute in techno and socio-economic development of the nation as a whole and region in particular.

Mission of the Department

Mission of the Department

M.1: To create an academic ambience for achieving academic excellence by imparting in depth domain knowledge to the students through effective teaching learning, conceptual and practical exposure with latest tools and technologies.

M.2: To provide an environment & opportunity for students to utilize their potential and technical skills required for overall development through collaborative and professional activities.

M.3: To inculcate innovative research skills, promote professional ethics & entrepreneurship skills amongst the students to cater the needs of the Society.



Glimpses





Dawn of The Computer Science After Covid-19

The COVID-19 pandemic has reshaped the world in unprecedented ways, and the field of computer science is no exception. As businesses, governments, and individuals have had to adapt to new ways of working and living, technology has played an increasingly important role in keeping us connected and productive. The dawn of computer science after COVID-19 has



brought with it new challenges and opportunities for innovation. One of the most immediate changes brought on by the pandemic was the shift to remote work and learning. This meant that people needed reliable and secure ways to communicate and collaborate from home. The demand for video conferencing software, remote desktop access, and virtual private networks (VPNs) skyrocketed, and companies that had invested in these technologies saw a surge in demand for their products.

At the same time, the pandemic highlighted the importance of data analytics and artificial intelligence (AI) in understanding and mitigating the spread of the virus. Machine learning algorithms were used to track the virus's spread and predict where it might spread next. Healthcare professionals used data analytics to monitor hospital capacity and identify areas of need. And AI-powered chatbots were used to help answer questions from the public about the virus and the response to it.

The pandemic also brought renewed attention to the issue of cybersecurity. With more people working from home and accessing sensitive data remotely, the risk of cyberattacks increased. This has led to a greater emphasis on securing networks and devices, and the development of new technologies to detect and prevent cyber threats.

In conclusion, the dawn of computer science after COVID-19 represents an exciting and challenging time for the field. As we continue to adapt to new ways of working and living, the role of technology in our lives will only continue to grow. By embracing innovation and working together to solve global challenges, we can build a brighter future for everyone.

PRATHAM RAJ
CSE, I Sem



The Future of Payments: Digital and Contactless Payments After the Pandemic

The COVID-19 pandemic has dramatically changed the way we live and work, forcing people to stay at home and businesses to adapt to new ways of operating. One of the most significant changes that have emerged during this



new norm. In this article, we will discuss the future of payments and how digital and contactless payments are likely to shape the future of commerce.

Digital and contactless payments offer numerous benefits over traditional payment methods. They are faster, more convenient, and more secure, reducing the need for physical interaction and minimizing the risk of fraud. Additionally, digital and contactless payments provide a record of transactions, making it easier for businesses to track payments and for consumers to manage their finances.

The rise of digital and contactless payments has significant implications for businesses. Companies that have already adopted these payment methods are likely to see an increase in sales, as consumers are more likely to choose businesses that offer these options. Furthermore, businesses that have not yet embraced digital and contactless payments risk falling behind their competitors and losing customers.

As the world continues to navigate the pandemic, digital and contactless payments are likely to become even more prevalent. With the convenience and security they offer, these payment

ISHA THAKUR
CSE, I Sem



Remote Work: The Pros and Cons of Working from Home

The COVID-19 pandemic has forced many companies to shift to remote work to prevent the spread of the virus. While remote work offers many benefits, such as saving commute time and providing more flexibility, it also presents



society. Remote work is enabled by various technologies, such as virtual private networks (VPNs), voice over internet protocols (VoIPs), virtual meetings, cloud technology, and work collaboration tools. These technologies have allowed employees to work from home while maintaining productivity and communication with their colleagues. Remote work also saves time and reduces costs associated with commuting, leading to a more efficient and cost-effective work environment. Moreover, it provides more flexibility and allows employees to achieve a better work-life balance.

If remote work becomes more common after the pandemic, employers may decide to reduce lease costs and hire people from regions with cheaper labor costs. This could lead to a shift in the job market, with certain regions and professions benefiting more than others. Policies with respect to data flows and taxation would need to be adjusted should the volume of cross-border digital services rise significantly. Furthermore, laws and regulations must be updated to accommodate remote work, and further psychological studies need to be conducted to understand the effect of remote work on people.

HIMANSHU JAIN
CSE, I Sem



Online Shopping and Robot Deliveries

The rise of online shopping has been one of the biggest changes in the retail industry in recent years. Thanks to the convenience and ease of shopping from home, online marketplaces have grown at an incredible rate, offering everything



a luxury, but a necessity for many people around the world.

One of the biggest challenges of online shopping is the need for a reliable logistics system to get products from warehouses to customers' homes. With the pandemic, this challenge has become even more urgent, as traditional in-person delivery methods are no longer safe. To address this issue, many companies have been exploring contactless delivery services, where goods are left at a designated location instead of being handed directly to the customer.

Despite these challenges, there is no doubt that the trend towards online shopping and contactless delivery is here to stay. With the pandemic still ongoing in many parts of the world, people are likely to continue relying on these services for the foreseeable future. This means that companies that can offer fast, reliable, and safe delivery options are likely to have a competitive edge in the market.

Overall, the rise of online shopping and robot deliveries is a sign of the rapid changes taking place in the retail industry. While there are still challenges to be overcome, the potential benefits of these

HARSHITA SAHU
CSE, I Sem



Importance of Technology In Today's World

Technology has become an integral part of our daily lives and has revolutionized the way we live and work. It has brought numerous advantages to society, and in this article, we will explore some of the most significant benefits. One of the most



people to connect with each other from all around the world. Whether it's through messaging apps or video calls, technology has made it possible for us to stay in touch with our loved ones no matter where they are. This has made communication faster and more efficient, bringing people closer together.

Another area where technology has transformed our lives is education. Online learning has become increasingly popular, and people can now take courses from top universities around the world from the comfort of their own homes. This has made education more accessible and affordable, and it has also allowed people to learn at their own pace. With online learning, students can access high-quality education regardless of their location or financial status. Technology has also had a significant impact on the healthcare industry. From medical devices that can monitor our health in real-time to telemedicine, which allows patients to receive medical care remotely, technology is transforming the way we think about healthcare. It has also led to the development of new treatments and therapies that have improved patient outcomes. For example, robotic surgeries have become increasingly common, allowing doctors to perform complex

MOHIT RAJ
CSE, I Sem



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

Department Of Electrical Engineering

As we all know, Electrical Engineers are the backbone of the modern world, responsible for designing, building, and maintaining the essential infrastructure that powers our daily lives. From power generation and transmission to the development of cutting-edge integrated circuits, Electrical Engineering plays an indispensable role in today's society.

The field of Electrical Engineering is an ever-evolving and exhilarating one, constantly pushing the boundaries of innovation and progress.

Our department is dedicated to preparing our graduates to meet the demands of the industry and society at large. We strive to instill in our students not only the technical skills they need to succeed but also the human values, sense of responsibility, and ethical principles that will make them well-rounded and compassionate individuals.

Dr. Ramakanta Sahoo
EE (HOD)



DAZZLING STARS

Academic Year 2021- 2025

Final Year

Harshita Jha
Topper

Jay Sahu
2nd Rank

Abhinay Shrivastava
3rd Rank

Third Year

Brijesh Yadav
Topper

Shreyansh Kumar Sahu
2nd Rank

Ankesh Kumar
3rd Rank

Second Year

Harshita Jha
Topper

Palak Gautam
2nd Rank

Abhinay Shrivastava
3rd Rank

First Year

Jay Paraste
Topper

Nikita Shakya
2nd Rank

Satish Kumar Yadav
3rd Rank



Department of Electrical Engineering

Vision of the Department

To impart education to the students of Electrical Engineering in core and multidisciplinary subjects for academic excellence, placements and good human values.

Mission of the Department

To mould the students into competent technocrats to become professionally skilled, intellectually adept and socially responsible, to contribute to the society through quality teaching and providing the conducive learning environment





Our New Future : Modern Transformer

Transformers have been a critical component of the electrical grid for over a century, and they continue to play a vital role in the power industry today. However, as the energy landscape changes and new technologies emerge,



transformer. One of the most significant changes in modern transformers is their size. Traditional transformers are often large and bulky, making them difficult to install in urban areas where space is at a premium. Modern transformers, on the other hand, are designed to be compact and lightweight, making them easier to install in a variety of settings. This is especially important as more renewable energy sources are integrated into the grid, requiring transformers to be installed in locations that were previously considered unsuitable.

Another important feature of modern transformers is their efficiency. Transformers are responsible for converting the voltage of electrical power to a level that can be used by consumers, and in the process, they can lose energy in the form of heat. This energy loss can be significant, especially in older, less efficient transformers. However, modern transformers are designed to minimize energy loss and increase efficiency, helping to reduce the overall carbon footprint of the power industry.

One way that modern transformers are achieving greater efficiency is through the use of advanced materials. For example, some transformers are now built using amorphous metal, which is

Harshita Jha
EE, VIII Sem



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

Department Of Electronics and Communication Engineering

The Electronics and Communication Engineering department aims to become a centre of excellence in teaching and research, transforming students into good human beings and competent professionals. The highly qualified faculty from IIT and NIIT emphasize practical exposure alongside theoretical knowledge. The department has well-equipped labs for VLSI, Antenna, MATLAB, Digital Signal Processing, Circuit Simulation, Instrumentation, and Communication. Various training programs,

**Dr. Jitendra Pratap Singh
Mathur
EC (HOD)**



Department of Electronics and Communication Engineering

Vision of the Department

To become a “centre of excellence” in the field of Electronics and Communication Engineering by transforming the students into competent professionals with high ethical values and fulfilling societal needs.

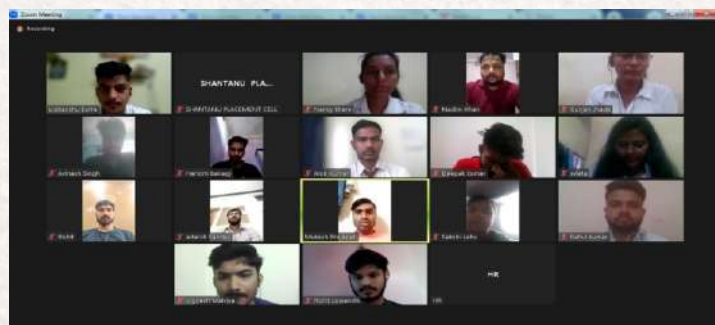
Mission of the Department

M.1: To create an academic ambience for achieving academic excellence and producing competent graduates through effective teaching learning process.

M.2: To provide exposure of modern tools and cutting edge technologies in the field of Electronics and Communication Engineering.

M.3: To develop adequate and appropriate facilities and provide environment to stimulate multidisciplinary interaction.

M.4: To enhance employability by inculcating problem solving abilities, team spirit, leadership qualities and professional ethics.





DAZZLING STARS

Academic Year 2021- 2025

Final Year

Neetu Singh
Topper

Muskan Gupta
2nd Rank

Vaishnavi Vishwakarma
3rd Rank

Third Year

Priyanka Shukla
Topper

Pradeep Shukla
2nd Rank

Ankit Yadav
3rd Rank

Second Year

Nihal Turkar
Topper

Abhishek Kushwaha
2nd Rank

Priyanshi Singh
3rd Rank

First Year

Mritunjay Patel
Topper

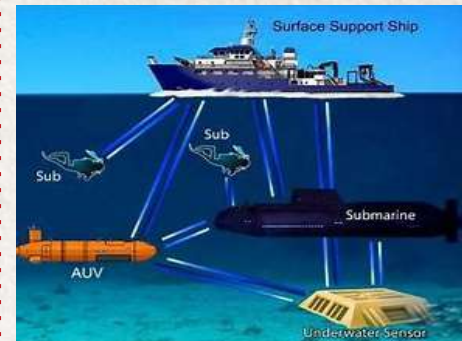
Amber Chourasia
2nd Rank

Vishal Atulkar
3rd Rank



IR Wireless Underwater Communication System

Underwater communication has always been a challenge for humans. The medium of water makes it difficult for electromagnetic waves to transmit signals over long distances, as they are quickly attenuated and scattered.



communication. An IR wireless underwater communication system utilizes light in the infrared region of the electromagnetic spectrum to transmit data. This system uses modulated IR light to transmit information through the water. The system consists of a transmitter, a receiver, and a communication channel.

The transmitter is responsible for encoding the message into an IR signal that is then transmitted through the water. The receiver receives the signal and decodes it back into the original message. The communication channel is the water itself, which acts as a medium for the transmission of the signal.

The advantage of using IR for underwater communication is that it is relatively immune to the electromagnetic interference that occurs in the underwater environment. IR signals are also not affected by the high levels of noise that are present in the water, which makes them more reliable for communication. Finally, modern transformers are designed to be more resilient in the face of natural disasters and other emergencies. For example, some transformers are now built with reinforced casings that can withstand extreme weather events like hurricanes and floods. Others are equipped with automatic shut-off systems that can detect dangerous conditions and quickly shut down the

MUSKAN GUPTA
EC, I Sem



The Upgrade In Network : 5G

The fifth generation of wireless network technology, or 5G, is the newest advancement in mobile communication. It is expected to revolutionize the way we use the internet, with lightning-fast speeds, reduced latency, and the ability



to 20 times faster than 4G networks. It has the potential to download a full-length movie in just a few seconds and enable real-time streaming of 4K video. With 5G, users can expect to experience a significant improvement in their internet speeds and browsing experience. In addition to faster speeds, 5G will also reduce latency, which is the delay in communication between the device and the network. With reduced latency, users can expect to experience a more responsive internet experience. This will be especially important for applications that require low latency, such as online gaming and virtual reality.

Another significant advantage of 5G is its ability to connect more devices simultaneously. With the growing number of connected devices, 5G will provide the necessary bandwidth to support the Internet of Things (IoT). This will enable devices to communicate with each other seamlessly and without interruptions. However, the rollout of 5G is not without its challenges. One of the significant hurdles is the need for more infrastructure to support the technology. 5G requires a more extensive network of cell towers and base stations compared to 4G, which means that telecommunication companies will need to invest significantly in

MAYANK SEN
EC, I Sem



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

Department Of **CIVIL Engineering**

The Department of Civil Engineering at TIT Excellence uses a perfect blend of theoretical and practical approaches in its curriculum to provide the best education to its students. The department emphasizes the importance of management and entrepreneurship skills and offers training and evaluation techniques for the same. With the use of the latest civil engineering software and project work, the department prepares its students for the current industry

Dr. Ravindra Gautam
CE (HOD)



Department of Civil Engineering

Vision of the Department

To develop technically competent and socially responsible Civil Engineering professionals with up-to-date knowledge and innovative ideas for contributing in techno and socio-economic development of the country as a whole and region in particular.

Mission of the Department

M1: To achieve academic excellence in Civil Engineering by imparting in-depth technical knowledge to the students through conceptual and practical exposure on latest tools and technologies

M2: To provide an environment & opportunity for students to grow and bring out their inherent talents for their overall development through collaborative and professional activities and prepare them for lifelong learning in global perspectives

M3: To inculcate professional ethics, right human values and promote good communication and leadership skills in Civil Engineering students for working in interdisciplinary domain with innovative approach to address the needs of the society.





DAZZLING STARS

Academic Year 2021- 2025

Final Year

Abrar Sagir
Topper

Aryan Gupta
2nd Rank

Manjit kumar shah
3rd Rank

Third Year

Maneesh Kumar Kushwaha
Topper

Raju
2nd Rank

Shivangi Shukla
3rd Rank

Second Year

Kuber soni
Topper

Shivangi Agnihotri
2nd Rank

Ashutosh Nagar
3rd Rank

First Year

Mritunjay Patel
Topper

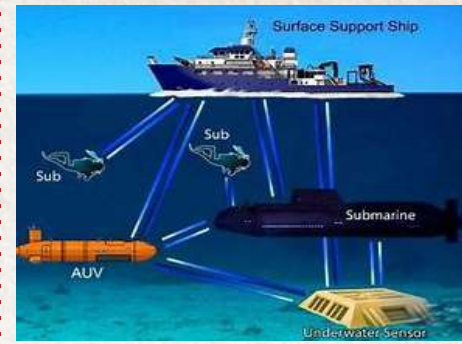
Amber Chourasia
2nd Rank

Vishal Atulkar
3rd Rank



High Speed 2 (HS2)

High Speed 2 (HS2) is a major infrastructure project that is set to transform rail travel in the UK. The project involves the construction of a new high-speed rail line that will connect eight of Britain's largest cities



and HS2 is to encourage a modal shift from road to rail travel, reducing congestion on the roads and lowering carbon emissions. With speeds of up to 224 miles per hour, HS2 will be a faster and more efficient way of travelling long distances. It's hoped that this will encourage more people to use the rail network, helping to reduce the number of cars on the roads.

Hs2 has been controversial from the start, with some environmental groups criticising the project's cost and potential impact on green spaces. The project has faced significant opposition from local residents and campaigners who are concerned about the impact of the construction work and the potential loss of green space. However, supporters of HS2 argue that the project is necessary to meet the growing demand for rail travel in the UK. With the population expected to grow by 10 million over the next 25 years, it's essential that we invest in new infrastructure to meet the needs of the future. HS2 is just one part of this wider plan to improve the UK's transport infrastructure and ensure that we have a network that is fit for purpose in the 21st century.

PRAGYA SABLE
CE, I Sem



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

Department Of Mechanical Engineering

The Department of Mechanical Engineering was established in 2007 with the aim of supporting India's industrial development. The department has state-of-the-art laboratories for Theory of Machine, Dynamics of Machine, Energy Conversion System, Fluid Mechanics, Turbo Machinery, Heat and Mass Transfer, Refrigeration and Air Conditioning, and a CAD center equipped with 60 systems loaded with design and drafting software. The workshop has well-equipped shops like Machine, Welding, Fitting, Carpentry, Smithy, and Foundry. The department also regularly

**Dr. Adarsh Sachdeva
ME (HOD)**



Department of Mechanical Engineering

Vision of the Department

To develop technically competent, intellectually adept and socially responsible mechanical engineering graduates possessing research aptitude and global competency who can contribute in technological and socio-economic development of the nation.

Mission of the Department

M.1: To create an academic ambience for achieving academic excellence by imparting in-depth domain knowledge to the students through effective teaching learning and practical exposure for latest tools and technologies.

M.2: To provide an environment and opportunity for the students to carry out innovative solutions of technical issues through research and also to promote them for higher studies.

M.3: To develop entrepreneurship skills amongst students so as to become ethical and socially responsible entrepreneurs capable to fulfil the needs of





The Evolution of HVAC Systems and their Impact On Energy Efficiency

Heating, ventilation, and air conditioning (HVAC) systems have come a long way since their inception. They have evolved to become more efficient, cost-effective, and environmentally friendly. HVAC systems are now an essential part of our



The first HVAC systems were invented in the early 1900s, and they were designed to cool and dehumidify air in industrial spaces. These systems used refrigeration technology to cool the air, and they were primarily used to maintain the quality of products such as food, medicine, and electronics. Over time, HVAC systems evolved to include heating capabilities and became more common in residential and commercial buildings.

In the 1970s, the energy crisis led to the development of more efficient HVAC systems. Energy-efficient systems were designed to reduce energy consumption, lower operating costs, and improve indoor air quality. This led to the development of systems with better insulation, tighter seals, and more efficient motors.

The introduction of digital controls and sensors in the 1980s allowed for better monitoring and control of HVAC systems. This led to the development of systems that could adjust to changes in temperature, humidity, and occupancy. By the 1990s, HVAC systems had become more energy-efficient, and regulations were put in place to ensure that all new systems met certain energy efficiency standards.

Akash
ME, I Sem



The Role of Mechanical Engineering In Space Exploration

Space exploration has been one of the most exciting and challenging fields of engineering. It has opened up new frontiers for humanity and pushed the limits of science and technology. Mechanical engineering has played a critical role in space



Mechanical engineers are responsible for designing and constructing spacecraft that can withstand the harsh conditions of space. This includes designing the structure of the spacecraft, as well as the propulsion systems, communication systems, and life support systems. Mechanical engineers must also consider the weight and size of the spacecraft, as it must be launched into space by a rocket. This requires a thorough understanding of materials science, as the spacecraft must be lightweight yet strong enough to withstand the forces of launch and travel through space.

Mechanical engineers are also involved in the design and development of space suits used by astronauts during spacewalks. These suits must protect the astronauts from the vacuum of space, extreme temperatures, and radiation. The suit must also provide oxygen, cooling, and communication systems to keep the astronaut alive and connected to the spacecraft.

Abhishek Chaturvedi
ME, VI SEM



Vibrant Tinge of 'SHE'



SHE is empowered...
An epitome of sacrifice and devotion,
Carefree life of unbridled imagination.
She's proud and strong, despite obstacles,
Let's see this world through her spectacles.
She has the canvas to sprinkle colours,
Designs her life that sparkle.
Gives birth to a new life and faith,
She's empowered with no dearth.
Her study voice, so loud and clear,
That anyone can hear and reverse.
She has always been a pioneer,
In all the ways to love, mingle and cheer.
Ever ready for breaking the glass ceiling,
With her pellucid emotions and feelings.
Her dedication and hard work,
Requires to be paid off with all perks.
It's an opportune time to celebrate,
The beauty, courage , and tolerance at great

Dr. Sangeeta Kumar



बचपन

मैंने खो दिया है आपना बचपन मुझे उसको लौटा दो ना
लगा दो मेरे सपनों को पंख मुझे फिर उड़ना सिखा दो ना

जिम्मेदारी की बोझ में मैंने खोया बहुत है
दो वक्रत रोटी की चाह में मैंने रोया बहुत हैं
फिर से मेरे दिल में ऐसा कोई दीपक जला दो ना
सच होते हैं ख्वाब भी ये मुझको भी सीख दो ना
मैंने भी दिया है आपना बचपन मुझे उसको लौटा दो ना

मैंने भी दिया है आपना बचपन मुझे उसको लौटा दो ना

मैंने भी सोच था गूडडे -गुरियों से खेलूंगी
बारिश में अपनी भी एक कइती धकलूंगी
टूट कर जो बिखरे है सपने फिर उसको सजा दो ना
हूँ दुनिया से थोरी आपनजां मुझे पढ़ना सीख दो ना
मैंने खो दिया है आपना बचपन मुझे उसको लौटा दो ना



Prof. Ram Sahu

The function of education is to teach one to think intensively and to think critically. Intelligence plus character - that is the goal of true education.



Dr. Sangeeta Kumar

One has to keep watchful eyes on his area of improvement
Because this way you can never stop your learning to be perfect human being...



K.K. Patel

Educating yourself does not mean you were stupid in the first place, it means that you are intelligent enough to know that there is plenty left to learn.



Dr. Sibi Jose

“As your teachers, we believe in your potential. Embrace challenges as opportunities for growth, seek help when needed, and never underestimate your abilities. We are committed to supporting you on your educational journey and are excited to see all that you will accomplish.”



Prof. Avadhesh Shakya

'If you don't go after what you want, you'll never have it. If you don't ask, the answer is always no. The engine of your life till now has been running in the lower gears (bumpy & uneven ride), now it's time to put it into final gear through hard work & sincerity & then enjoy the smooth ride in the highest gear as successful & satisfied career.



“Best friend”

The importance of having a Best friend in our life.

In short and sweet, LIFE means ups and down if a life is going in a simple way, it means you are not living the life so always make yourself confident that you are ready to face the ups and down of life and the confidence that you get from your Best friend.

Best friend! what does it mean? from my point of view a person who always takes stand in your good and bad times. They never think about the world because in friendship no matter where they are standing but what matters is with whom they are standing. A Best friend always ready to support you emotionally when you feel low and so many things.

If we talk about growth, a best friend always holds your hand and he/she may never show selfishness. Best friend always stands out at a different priority level in your heart as compared to normal friends and you should always keep a wall between your best friend and common friend. Always try to make memories with your bestie because after some years common friend will forget you but only one person never going to forget you, and that is the one whom you can call a best friend.

In times like now, avoid making lot of friends, but at least make one loyal best friend about whom you are proud. I am also having one best friend who always supports me. Everybody has different perception about best friend but for me, she is one with whom you can share your personal things without any hesitation.

If I want to talk about my personal experience, my best friend always supports me and even I too. They are just like family members. They are just like angels in our life.

“A best friend holding your hand is much precious than the whole world is taking your stand”

Mohit Raj



SKETCHES AND PHOTOGRAPHY





Obituary

It is with heavy hearts that we share the news of the passing of **Lt. Prof. Deepa Chaurse** and **Lt. Prof. Sandeep Mishra**, beloved members of our Institute who lost their battle with COVID-19 during the pandemic.

Your loss is a tragedy, and our hearts go out to family and loved ones. We are grateful for the time we had with you and your memories left behind. We will always remember your unwavering dedication as well as your contributions to our college community.



Lt. Prof. Deepa Chaurse
Dept. of Computer Science Engineering



Lt. Prof. Sandeep Mishra
Dept. of Mechanical Engineering



NEWS FLASH

दैनिक भास्कर

डीने वाले बानू फेम आस्था गिल ने अपने गीतों से समाज को प्लेसमेंट सक्सेस में स्टूडेंट्स ने दिखाया हुनर, दी रंगारंग प्रस्तुति

बोपाल: टेक्नोक्रेट्स ग्रुप ऑफ इंस्टीट्यूट्स में अपने गीतों से समाज को प्लेसमेंट सक्सेस में स्टूडेंट्स ने दिखाया हुनर, दी रंगारंग प्रस्तुति।

दैनिक भास्कर

टेक्नोक्रेट्स ने मनाया आजादी का अमृत महोत्सव

भोपाल: टेक्नोक्रेट्स समूह ने आजादी का 75वां महोत्सव बड़े होंठों उल्लास के साथ मनाते हुए नए विचारों का आत्मनिर्भरता का अमृत के रूप में आत्मसात किया। संस्थान के मुख्य संरक्षक डॉ. रामरज करसोलिया ने ध्वजारोहण किया। इसके बाद एनसीसी कैडेट द्वारा गांधीचरित्र किया गया, परेड का निरीक्षण संस्था की अध्यक्ष साधना करसोलिया ने किया और फिर परेड की सलामी ली। संस्थान की सदस्यों द्वारा तिरंगा रैली निकाली गई। रक्त

दैनिक भास्कर

वर्षा को स्वच्छ बनाएगी यूर प्युरिफायर बिल्डिंग

भोपाल: वर्षा को स्वच्छ बनाएगी यूर प्युरिफायर बिल्डिंग।

दैनिक भास्कर

वे ही वचो देश के कर्णधार बनेंगे: ज्योतिरादित्य सिंधिया

भोपाल: वे ही वचो देश के कर्णधार बनेंगे: ज्योतिरादित्य सिंधिया।

दैनिक भास्कर

17 नेशनल खेल चुर्की अंजना, अब किलिमिंजारो पर फहराएंगी तिरंगे

भोपाल: 17 नेशनल खेल चुर्की अंजना, अब किलिमिंजारो पर फहराएंगी तिरंगे।

दैनिक भास्कर

यूनेमिक आंत्रप्रेन्योर ऑफ ईयर अवॉर्ड सौरभ को

भोपाल: यूनेमिक आंत्रप्रेन्योर ऑफ ईयर अवॉर्ड सौरभ को।

दैनिक भास्कर cityभास्कर

'रफ्तार' का लाइव कॉन्सर्ट 24 को

भोपाल: 'रफ्तार' का लाइव कॉन्सर्ट 24 को।

दैनिक भास्कर

टेक्नोक्रेट्स और क्रिस्प के बीच अनुबंध

भोपाल: टेक्नोक्रेट्स और क्रिस्प के बीच अनुबंध।

दैनिक भास्कर

टीआईटी का लाइव कॉन्सर्ट 24 अप्रैल को

भोपाल: टीआईटी का लाइव कॉन्सर्ट 24 अप्रैल को।

टेक्नोक्रेट्स स्टूडेंट्स का शानदार प्रदर्शन

भोपाल। स्मार्ट इंडिया हैकाथॉन में टेक्नोक्रेट्स ग्रुप ऑफ इंस्टीट्यूट्स की टीम ने दूसरा स्थान प्राप्त किया। रविवार को हैकाथॉन के समापन कार्यक्रम में सांसद आलोक संजय मौजूद थे। कॉम्पिटिशन में पहला पुरस्कार दिल्ली की टीम ने जीता। मध्यप्रदेश की विजेता टीम टेक्नोक्रेट्स को पुरस्कार के रूप में 75 हजार स्पष्ट प्रदान किये गए।

टीआईटी को हाईएस्ट प्लेसमेंट

भोपाल, टीआईटी ग्रुप को इन प्रप के अवार्ड से नवा पुरस्कार प्रदेश मुख्यमंत्री शिवराज सिंह चौहान ने कोर्टयार्ड में आयोजित कार्यक्रम में दिया। अवार्ड ग्रुप के संचालक डॉ. शशि कुमार जैन ने प्राप्त किया।

टेक्नोक्रेट्स समूह का किया विजिट

भोपाल: टेक्नोक्रेट्स समूह का किया विजिट।

समापन कार्यक्रम में सांसद आलोक संजय मौजूद थे। कॉम्पिटिशन में पहला पुरस्कार दिल्ली की टीम ने जीता। मध्यप्रदेश की विजेता टीम टेक्नोक्रेट्स को पुरस्कार के रूप में 75 हजार स्पष्ट प्रदान किये गए।



Dr Surabhi Karsoliya awarded "Assocham India Women Achievers Award" for "Best Woman Entrepreneur of the Year in Education Sector" by Smriti Zubin Irani, Hon'ble Minister of Women and Child Development, Govt. of India during Women's Leadership & Empowerment Summit & Awards 2019.

Shikhar
2021



TECHNOCRATS

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