



Shikhar
2022

INSPIRED ROOTS

THE NEW AWAKENING



TECHNOCRATS INSTITUTE OF TECHNOLOGY (Excellence)

Anand Nagar, BHEL, Bhopal, Madhya Pradesh 462021

Contact us at : director_tit@titexcellence.net; website: www.titexcellence.net



Highest Placements and Best Academics in Central India Award - 2022" at 'Zee Madhya Pradesh Chhattisgarh Business Leadership Conclave' by Shri Anurag Thakur, Hon'ble Union Minister of Information and Broadcasting, Youth Affairs and Sports.



राज्यपाल, मध्यप्रदेश
भोपाल - 462052



मंगुभाई पटेल

मुझे यह जानकर प्रसन्नता हो रही है कि टेक्नोक्रेट्स इंस्टीट्यूट ऑफ टेक्नोलॉज (एक्सीलेंस), भोपाल द्वारा वार्षिक पत्रिका 'शिखर-2022' का प्रकाशन किया जा रहा है।

शिक्षण संस्थानों द्वारा पत्रिका का प्रकाशन विद्यार्थियों के लिए विचार वभावों को अभिव्यक्त करने का सशक्त माध्यम है। इस प्रकार की पत्रिकाएं विद्यार्थियों को निखारने में सहायक होती है। मुझे आशा है कि देश प्रेम और चरित्र निर्माण जैसे वभिन्न पहलुओं से संबंधित पठनीय सामग्री का समावेश किया जाएगा जिससे देश में जिम्मेदारी युवा पीढ़ी का निर्माण सुनिश्चित हो सकेगा।

शुभकामनाएं

मंगुभाई पटेल

- 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



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CHAIRPERSON'S MESSAGE

It gives me immense pleasure to address you all through the pages of Shikhar, our college's annual magazine. As the Chairperson of this esteemed institution, it is my honor to share my thoughts and feelings with all of you. A college magazine is a treasure of the innovation and endowments of the college. I am proud to present to you the latest edition of our college magazine, Shikhar. This magazine reflects the creativity, diversity, and talent that exists within our college community.

As we continue to face challenges in these unprecedented times, I believe that Shikhar plays an important role in fostering a sense of community and belonging among our students. It allows us to express our thoughts, share our experiences, and learn from one another.

I encourage all of you to take the time to read through this year's edition of Shikhar. It is a testament to the incredible talent and creativity that exists within our college community. Let us continue to strive for excellence and work towards building a stronger and more connected college community.

GOODLUCK!

Chairperson



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VICE CHAIRMAN'S MESSAGE

As the Vice Chairman of our esteemed college, I am delighted to address you all through the pages of our college magazine, Shikhar-22. This magazine is a platform for us to showcase our talents and creativity, and I am proud to say that this year's edition is no exception.

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

With these inspiring words, Shikhar is not just a collection of articles and stories; it is a reflection of our values, aspirations, and achievements. It showcases the diverse talents and interests of our students and faculty and celebrates our collective success as a community. I want to extend my gratitude to the editorial team and all the contributors who have put in their hard work and dedication to make this year's magazine a success. I am impressed with the level of creativity and talent displayed, and I am confident that this magazine will inspire and motivate our fellow students.

Vice Chairman



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MANAGING DIRECTOR'S MESSAGE

“Inspiration does exist, but it must find you working”

I am thrilled to introduce to you our annual college magazine, which is a testament to the incredible talent and hard work of our college community.

Our commitment to excellence and your unwavering dedication to promoting creativity and innovation have been instrumental in making our magazine a success. Your vision and passion for this project have inspired us all to strive for excellence and to produce content that is engaging, informative, and thought-provoking.

Our magazine has become a platform for students, faculty, and staff to showcase their talents and share their perspectives, and I am proud of the work we have accomplished together.

To our readers, I hope you enjoy this year's edition of our college magazine and that it inspires you to continue to explore your passions and share your unique perspectives.

Managing Director



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DIRECTOR'S MESSAGE

As the Director of our college, I am extremely proud of our college magazine, which serves as a platform for our students to express themselves creatively and showcase their talents.

I am incredibly grateful to the editorial team and all the contributors who work tirelessly to bring this magazine to life each year. Their dedication and hard work are truly inspiring, and I am constantly amazed by the quality and variety of content that they can produce.

As there comes many challenges in these unparalleled times, I believe that our college magazine plays an important role in advancing a sense of community and belonging among our students. It allows us to express our thoughts, share our experiences, and learn from each other.

Prof. (Dr.) K.K. Dwivedi



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ADDITIONAL DIRECTOR'S MESSAGE

Dear Readers of Shikhar 2022,

Shikhar 2022 aims to be a platform for the students to express their views, share their experiences, and showcase their talents. As an Additional Director, I believe that it is our responsibility to ensure that every student has the opportunity to contribute to this magazine and have their voices heard.

We have a team of talented writers, photographers, and editors who are dedicated to producing quality content for our readers. We will continue to bring you the latest news and events happening within the college campus and beyond.

I encourage all of you to get involved with Shikhar 2022, whether it be by submitting an article, photograph, or artwork. This is your chance to share your ideas and creativity with the college community.

I look forward to a successful and productive year ahead for Shikhar 2022.

Best regards,

Prof. Pankaj Patel



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CHIEF EDITOR'S MESSAGE

It is my great pleasure to introduce this year's annual college magazine. As the chief editor, I have had the privilege of working with a talented and dedicated team of writers, photographers, and designers to produce a publication that truly captures the spirit and essence of our college.

This year's magazine reflects the creativity, diversity, and intellectual curiosity that define our community. From insightful commentary on current events and social issues to in-depth profiles of inspiring alumni and faculty, our magazine showcases the very best of what our college has to offer.

We have also dedicated a section of the magazine to the creative works of our students, featuring artwork, poetry, and fiction from some of our most talented writers and artists.

Our team has worked tirelessly to ensure that every aspect of the magazine meets the highest standards of journalism and design. We believe that this year's publication is a testament to the talent and dedication of our contributors, and we are incredibly proud of the final product.

I would like to thank all the contributors, photographers, and designers who have contributed their time, energy, and creativity to making this magazine possible. It is a true labour of love, and we hope that you enjoy reading it as much as we enjoyed creating it.

Priyanka Rai
Chief Editor



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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.

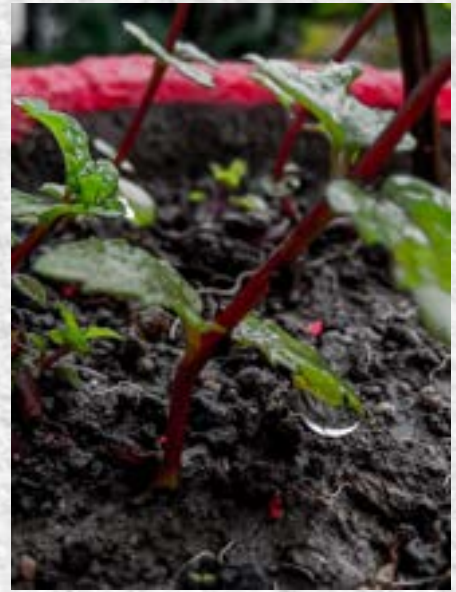
Abhinav Singh Baghel
Chief Editor
Student Editorial Board



Inspired Roots: “The New Awakening”

In a world that often seems to be moving too fast for us to catch up, it can be easy to forget where we came from. However, there is a new movement that is taking the world by storm, encouraging us to reconnect with our heritage and rediscover our true identity. This movement is called Inspired Roots, and it represents the new awakening that we've all been waiting for.

Inspired Roots celebrates diversity, promotes cultural awareness, and encourages people to reconnect with their ancestral heritage. It is an invitation to explore the richness of our past, discover our unique stories, and embrace our



identity. The New Awakening is the realization that we are all part of a larger community. It's about recognizing that our actions can have a profound impact on others, and that understanding our past can help us shape our future.

At the heart of Inspired Roots is the belief that our ancestors hold the key to our identity. By understanding their struggles, their triumphs, and their traditions, we can discover our own strengths and weaknesses. We can learn from their experiences and use that knowledge to shape our own lives. The movement is not just about looking back but also about looking forward. It's about taking the lessons of the past and applying them to the challenges of today. It's about using our cultural heritage to create a better future for ourselves and for future generations.

The New Awakening also recognizes that our heritage is not just a source of pride but also a responsibility. It is up to us to preserve and protect the traditions that have been passed down through generations. We must also be willing to share our cultural heritage with others, to promote understanding and tolerance.

In a world that often seems divided, Inspired Roots offers a glimmer of hope. It is a reminder that we are all part of a larger community, and that by embracing our differences, we can create a better world. It's the realization that we are all connected, and that our diversity is what makes us strong. So, let's join the new awakening and be part of the movement that's changing the world. Let's embrace our roots, celebrate our heritage, and use that knowledge to create a better tomorrow.

(Editorial Board)



Editorial Board

Advisory Board:

- *Prof. (Dr.) K.K Dwivedi*
- *Prof. Pankaj Patel*
- *Prof. Ravindra Gautam*

Chief Editor:

- *Prof. Priyanka Rai*

Editors:

- *Prof. Avadesh Kumar Shakya*

Designer:

- *Ms. Ritu Pawar*

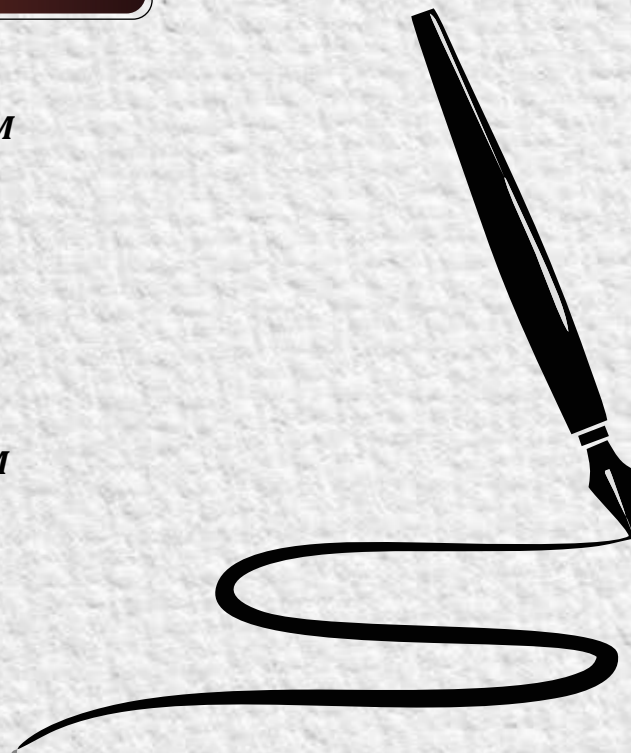
Student Editorial Board:

Chief Editor

- *Abhinav Singh Baghel*

Editors:

- *Ujjawal kumar , CSE- VI SEM*
- *Prince kumar Singh, CSE- VI SEM*
- *Soham Bharti, CSE- VI SEM*
- *Anand Soni, CSE- IV SEM*
- *Ankit Kumar, CSE- IV SEM*
- *Ankit Patel, CSE- IV SEM*
- *Ananya Paul, CSE- IV SEM*
- *Aakrati Barsaiyan, CSE- IV SEM*
- *Anushka Chourasia, CSE- IV SEM*
- *Shalani Kumari, CSE- IV SEM*
- *Mohit Raj, CSE- IV SEM*
- *Pratham Raj, CSE- IV SEM*
- *Muskan Gupta, CSE- IV SEM*





EDITORIAL BOARD



Standing L-R :- Ujjawal Kumar, Prince Kumar Singh , Soham Bharti, Aakrati Barsaiyan, Ankit Kumar, Priyanka Rai, Prof. Pankaj Patel, Prof. (Dr.) K.K. Dwivedi, Prof. Ravindra Gautam Anand Soni, Ananaya Paul, Ankit Patel, Mohit Raj, Pratham Raj



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Department Of Computer Science & Engineering

It is my pleasure to address you through the pages of our yearly college magazine. As the Head of the Department of Computer Science and Engineering, I am immensely proud of the achievements of our students and faculty members over the past academic year

Our department has witnessed some remarkable developments in terms of research, innovation, and academic excellence. Our faculty members have published numerous research papers in reputed journals and conferences, and many of them have also received funding for their research projects.

Our students have also made us proud by participating and winning in various national and international competitions, hackathons, and coding challenges. Their projects have received accolades from industry experts, and some of them have even been implemented in real-world scenarios.

As we move forward, we strive to maintain our commitment to excellence in teaching and research. We will continue to provide our students with the best possible education and equip them with the necessary skills to become successful professionals in the industry.

I extend my warmest wishes to all our students and faculty members for their continued dedication and hard work, and I look forward to another successful year ahead.

Dr. Rajesh Boghey
CSE (HOD)
TIT (Excellence)



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

M1: 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.

M2: To provide an environment & opportunity for students to utilize their potential and technical skills required for overall development through collaborative and professional activities.

M3: To inculcate innovative research skills, promote professional ethics & entrepreneurship skills amongst the students to cater the needs of the Society.

CSE Glances





**DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
BATCH : 2018 - 2022**





DAZZLING STARS

Academic Year 2021-2025

Final Year



Nehali Sujoriya
Topper



Chansi Bhadouria
2nd Rank



Kajal Kanade
3rd Rank

Third Year



Shruti Agarwal
Topper



Anushka Geete
2nd Rank



Ritika Panjwani
3rd Rank

Second Year



Naitik Parmar
Topper



Rishabh Bohare
2nd Rank



Soham Bharti
3rd Rank

First Year



Muskan Gupta
Topper



Vivek Kumar Sahu
2nd Rank



Ankit Kumar
3rd Rank



Universal memory : The guardian of all things

Universal memory, also known as universal memory storage (UMS), is a type of computer memory that has the potential to revolutionize the way we store and access data. Unlike traditional memory technologies such as RAM and hard disk drives, universal memory has the potential to be faster, more energy-efficient, and more durable.



There are several types of universal memory currently being researched, including phase-change memory (PCM), resistive random-access memory (RRAM), magnetic random-access memory (MRAM), and ferroelectric RAM (FRAM). Each of these technologies has its own unique properties and advantages, but they all share the potential to be used as a single, unified memory solution that can replace both RAM and storage devices such as hard disk drives and solid-state drives.

One of the key advantages of universal memory is its speed. Current RAM technologies are fast but volatile, meaning that they lose their data when the power is turned off. Storage devices such as hard disk drives and solid-state drives are slower but non-volatile, meaning that they retain their data even when the power is turned off. Universal memory has the potential to be both fast and non-volatile, making it an ideal solution for a wide range of applications.

Another advantage of universal memory is its energy efficiency. Traditional memory technologies require a significant amount of energy to read and write data, which can be a significant drain on battery-powered devices such as smartphones and laptops. Universal memory technologies are designed to be more energy-efficient, meaning that they can help to extend the battery life of these devices.

Universal memory also has the potential to be more durable than traditional memory technologies. Hard disk drives and solid-state drives can be damaged by physical shock or exposure to magnetic fields. Universal memory, on the other hand, is designed to be more robust and resistant to damage.

Anand Soni
CSE, II Sem



Quantum Computers : Probabilistic or Non- Deterministic Computers



Quantum computing is an emerging field of computing that has the potential to revolutionize the way we solve complex problems. Unlike traditional computing, which uses binary digits (bits) to represent data, quantum computing uses quantum bits (qubits) that can exist in multiple states at the same time.

The potential power of quantum computing comes from the fact that qubits can exist in a superposition of states, meaning that they can represent many more states simultaneously than classical bits. This allows quantum computers to perform certain types of calculations much faster than classical computers, making them ideal for tackling complex problems that are currently beyond the reach of classical computing.

One of the most well-known applications of quantum computing is in the field of cryptography. Quantum computers can break certain types of encryptions that are currently considered to be unbreakable by classical computers. This has led to a race between cryptography and quantum computing researchers to develop new forms of encryption that are resistant to attacks from quantum computers.

In conclusion, quantum computing has the potential to revolutionize the way we solve complex problems and tackle some of the most pressing challenges facing society today. While the field is still in its early stages, there is significant interest and investment in the development of practical quantum computing systems. As researchers continue to overcome the challenges of building practical quantum computers, we are likely to see significant advances in fields such as cryptography, drug discovery, and artificial intelligence in the years to come.

Ankit Kumar
CSE, II SEM

Smaller and Powerful Handheld Devices

Devices and nanotechnology have revolutionized the way we interact with the world around us. From smartphones to medical devices, these technologies have become ubiquitous in our daily lives, and are continuing to push the boundaries of what is possible.

Nanotechnology is the science of manipulating matter on a molecular or atomic scale. This technology has the potential to revolutionize a wide range of fields, from medicine and energy to electronics and materials science. By controlling the properties of materials at the nanoscale, researchers can create new materials with unique properties and functions that are not possible with traditional materials.

Nanotechnology is also revolutionizing the field of electronics. By using nanoscale materials, researchers are able to create smaller and more powerful devices, such as computer processors and memory devices. This has led to the development of new technologies such as quantum computing, which has the potential to revolutionize the way we solve complex problems.

One of the most exciting areas of research in device technology is in the field of wearable devices. By combining sensors, computing power, and wireless communication, researchers can create devices that can monitor a wide range of health and fitness metrics in real time. This has the potential to revolutionize the way we approach healthcare, allowing for more personalized and proactive treatment plans.

In conclusion, device and nanotechnology have the potential to revolutionize the way we live and interact with the world around us. From medical devices and energy systems to electronics and materials science, these technologies are driving innovation and creating new possibilities for the future. As researchers continue to push the boundaries of what is possible, we are likely to see significant advances in fields such as healthcare, energy, and computing in the years to come.

Ankit Patel
CSE, II SEM



The Key Aspect for Economic Development

The Open Intellectual Property (IP) Movement is a growing trend that seeks to promote the sharing of ideas and knowledge by making intellectual property freely available to the public. This movement is built on the principles of collaboration and cooperation and aims to create a more open and transparent system for innovation and creativity.



At its core, the Open IP Movement challenges traditional notions of intellectual property by questioning the value of exclusive ownership rights. Instead, it promotes the idea that sharing ideas and knowledge can lead to more innovation and progress. This is particularly relevant in fields such as technology and medicine, where access to information can be critical in solving complex problems and developing new solutions.

One of the key drivers of the Open IP Movement is the rise of open-source software. Open-source software is software that is made freely available to the public, with the source code being openly accessible and modifiable. This approach allows developers to collaborate and build upon each other's work, leading to more robust and innovative software products.

The Open IP Movement is also gaining momentum in the creative arts, with musicians, artists, and writers increasingly turning to open licensing models for their work. This approach allows creators to retain ownership of their work while also allowing others to freely use and build upon it, leading to new and innovative works that can reach a wider audience.

However, there are also challenges associated with the Open IP Movement. One of the main concerns is that it may lead to a lack of incentive for innovation and creativity, as individuals and organizations may be less motivated to invest in research and development if they are unable to profit from their work. Additionally, there are concerns about the protection of intellectual property rights, particularly in fields such as technology where patent infringement can be a significant issue.

Ananya Paul
CSE, II SEM



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



Department Of Civil Engineering

As the Head of the Civil Engineering Department, it is an honour for me to contribute to this year's college magazine. Our department takes pride in producing some of the most innovative and successful civil engineers, and this magazine is a testimony to their hard work and creativity. of the Civil Engineering Department, it is an honour for me to contribute to this year's college magazine. Our department takes pride in producing some of the most innovative and successful civil engineers, and this magazine is a testimony to their hard work and creativity.

To our readers, I hope that this year's magazine inspires you to explore the world of civil engineering further and appreciate the significant role it plays in shaping our society's infrastructure. We are proud of our students' achievements, and we look forward to continuing to nurture and develop the next generation of civil engineers.

Our students have put in tremendous effort into their research projects, and this year's magazine is an excellent platform for them to share their knowledge and insights with a wider audience. Through their articles and case studies, our students have showcased their technical expertise, critical thinking, and problem-solving skills, which are essential attributes for any successful civil engineer.

Dr. Ravindra Gautam
CE (HOD)
TIT (Excellence)



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.

CE Glances





**DEPARTMENT OF CIVIL ENGINEERING
BATCH : 2018 - 2022**





DAZZLING STARS

Academic Year 2021- 2025

Final Year



Sunil Kumar
Topper



Anmol Kochar
2nd Rank



Ajay Kumar Verma
3rd Rank

Third Year



Shivangi Agnihotri
Topper



Md. Sohel Ali
2nd Rank



Kuber Soni
3rd Rank

Second Year



Rohit Vishwakarma
Topper



Ashique Reza
2nd Rank



Prakash Singh
3rd Rank

First Year



Siddharth Sanodiya
Topper



Hasnain Khan
2nd Rank



Junior Jee Pandit
3rd Rank



Software is the Language of Automation

Automated equipment is revolutionizing the way that many industries operate. From manufacturing to healthcare, automated equipment has the potential to increase efficiency, improve safety, and reduce costs. In this article, we will explore what automated equipment is, how it works, and some of its benefits and drawbacks.



Automated equipment refers to machinery that is designed to perform tasks or processes with little to no human intervention. These machines use sensors, software, and other advanced technologies to control their operations, making them much more efficient and reliable than traditional equipment.

Automated equipment can be found in a wide range of industries, including manufacturing, transportation, healthcare, and agriculture. For example, in manufacturing, robots can be used to assemble products, while in healthcare, machines can be used to dispense medication.

Automated equipment typically relies on a combination of sensors, software, and actuators to perform its functions. Sensors are used to detect changes in the environment, such as temperature, pressure, or movement. Software is used to interpret this data and control the machine's actions, while actuators are used to perform physical tasks, such as moving components or applying force.

One of the key advantages of automated equipment is its ability to be programmed to perform specific tasks. This means that it can be customized to meet the needs of a particular industry or application. Additionally, many automated machines can be connected to a network, allowing them to communicate with other machines and systems in real-time.

Finally, automated equipment can help to reduce costs by reducing the need for manual labor and improving overall efficiency. Although the initial investment in automated equipment can be significant, the long-term benefits can outweigh the costs.

Siddharth Sanodiya
CE, II SEM



The Best Way To Predict The Future Is To Create It



Intelligent urbanization is a term that refers to the use of advanced technologies and data-driven approaches to create smarter, more sustainable cities. By leveraging the power of technology, intelligent urbanization aims to improve the quality of life for urban residents, reduce environmental impact, and increase economic growth. In this article, we will explore what intelligent urbanization is, how it works, and some of its benefits and challenges.

Intelligent urbanization is a concept that encompasses a wide range of technologies and approaches. It involves the use of data analytics, artificial intelligence, and other advanced technologies to create more efficient, sustainable, and liveable cities.

Intelligent urbanization involves the use of a variety of technologies and approaches. One of the most important is the Internet of Things (IoT), which involves connecting devices and sensors to the internet to collect and share data. This data can then be used to inform decisions about city planning, transportation, and other key areas.

Intelligent urbanization is an exciting development that has the potential to create smarter, more sustainable cities. By using data and technology to optimize infrastructure and services, urban planners can improve the quality of life for residents, reduce environmental impact, and stimulate economic growth. However, it is important to be aware of the potential challenges and to address them proactively to ensure that the benefits of intelligent urbanization are realized.

Aman Patel
CE, II SEM

Collaborating together, Coordinating better

Building Information Modeling is a digital representation of the physical and functional characteristics of a building. It is a process that uses 3D modeling software to create a detailed virtual model of a building, which can be used throughout its lifecycle, from design and construction to operation and maintenance.

The concept of BIM has been around for several decades, but it has gained widespread popularity and adoption in recent years, particularly in the architecture, engineering, and construction industries. In this article, we will explore what BIM is, how it works, and its potential benefits.

BIM is a process that involves creating a digital model of a building, which contains detailed information about its geometry, spatial relationships, and components. This model can be used by architects, engineers, contractors, and building owners to simulate and visualize the building's construction, operation, and maintenance.

The BIM model can also be used to analyze and optimize various aspects of the building's design, such as energy efficiency, structural integrity, and cost-effectiveness. It can be used to identify potential clashes and conflicts between different building components, and to coordinate the work of various teams involved in the building's construction.

The BIM process begins with the creation of a digital model of the building, using specialized 3D modeling software. The model is then populated with information about the building's components, such as walls, doors, windows, and mechanical and electrical systems.

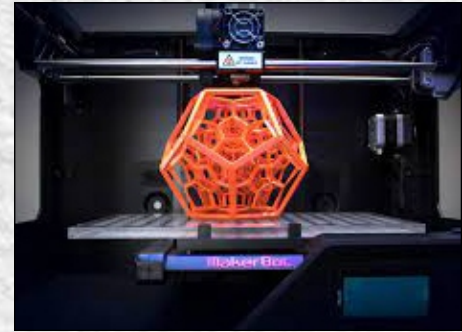
The BIM model can be used throughout the building's lifecycle, from design and construction to operation and maintenance. During the design phase, the BIM model can be used to simulate and visualize the building's construction and operation. During the construction phase, the BIM model can be used to coordinate the work of various teams and to track progress.

Aakrati Barsaiyan
CE, II SEM



The process of joining materials to make 3D objects

3D printing, also known as additive manufacturing, is a process that involves creating three-dimensional objects by layering materials on top of each other. This technology has been around for several decades but has gained popularity and become more accessible in recent years. In this article, we will explore what 3D printing is, how it works, and some of its potential applications.



3D printing is a manufacturing process that involves creating objects by adding successive layers of material until the desired shape is achieved. This process is different from traditional manufacturing processes, such as machining or casting, which involve removing material from a larger block or mold to create the desired shape.

The materials used in 3D printing can vary depending on the printer and the object being created. Common materials include plastics, metals, ceramics, and even biological materials such as living tissue.

The 3D printing process begins with a digital design file, which is created using computer-aided design (CAD) software. The design is then transferred to the 3D printer, which reads the file and begins to create the object layer by layer.

There are several different types of 3D printing technologies, each with its own unique approach to creating objects. Some common methods include fused deposition modelling (FDM), stereolithography (SLA), and selective laser sintering (SLS).

FDM involves melting a thermoplastic material and extruding it through a nozzle, layer by layer, to create the desired shape. SLA uses a laser to solidify a liquid resin, layer by layer, to create the object. SLS uses a laser to selectively melt a powdered material, layer by layer, to create the object.

3D printing is a fascinating technology with enormous potential to transform the way we create and manufacture objects. From personalized medical implants to large-scale construction projects, the possibilities are endless. However, it is important to be aware of the potential challenges and to continue to develop the technology in a responsible and sustainable way.

Anushka Chourasia
CE, II SEM



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



Department Of

Electronics and Communication Engineering

I am delighted to contribute to this year's college magazine as the Head of the Electrical and Communication Department. Our department is proud to have a long-standing history of producing talented and innovative students, and it is with great pleasure that we can showcase their work in this year's edition.

I would like to express my gratitude to the magazine team for their hard work and dedication in bringing this publication to life. Your efforts have resulted in a magazine that not only showcases the work of our department but also celebrates the diversity and creativity of our college community.

The Electrical and Communication Department has always been at the forefront of technological innovation, and this year's magazine is no exception. We are excited to share the latest research and developments in the field of electrical and communication engineering, as well as showcase the work of our students who have excelled in their academic endeavours.

Inspires you to pursue your interests and explore the world of electrical and communication engineering further.

To all our readers, I hope that this year's magazine inspires you to continue to explore your passions and to share your unique perspectives. Thank you for your continued support of our college community.

I would also like to thank our faculty members for their guidance and mentorship of our students. Their efforts in teaching and research have played a vital role in shaping the careers of our students and the overall success of our department.

Dr. Archana Sharma

ECE (HOD)

TIT (Excellence)



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.

ECE Glances





**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
BATCH : 2018 - 2022**





DAZZLING STARS

Academic Year 2021- 2025

Final Year



Priyanka Shukla
Topper



Pradeep Shukla
2nd Rank



Ankit Yadav
3rd Rank

Third Year



Nihal Turkar
Topper



Abhishek Kushwaha
2nd Rank



Subhash Kumar
3rd Rank

Second Year



Mritunjay Patel
Topper



Amber Chourasia
2nd Rank



Roshan Kumar Sahu
3rd Rank

First Year



Preeti Gurjar
Topper



Vivek Kelodiya
2nd Rank



Prateek Kumar Singh
3rd Rank



5G NETWORK : Everything, Connected

The world is constantly evolving, and so are the technologies that we use to communicate and share information. The arrival of 5G networks is set to be the next big revolution in the field of wireless communication. It promises to transform the way we connect with each other and the world around us.



5G is the fifth generation of wireless network technology. It is the successor to the current 4G LTE networks that we use today. While 4G was a significant leap forward in terms of speed and capacity, 5G takes this to the next level. It promises to deliver faster data transfer speeds, lower latency, and greater network capacity than any of its predecessors. One of the primary benefits of 5G networks is faster data transfer speeds. This means that you will be able to download and upload content at lightning-fast speeds, even in busy areas. It is estimated that 5G networks will be up to 100 times faster than 4G networks, with download speeds of up to 20 Gbps.

Latency refers to the delay between when you send a request for information and when you receive a response. With 5G networks, latency is expected to be significantly reduced, which means that information will be transmitted almost instantly. This is particularly important for applications such as virtual and augmented reality, where any lag can be very disruptive to the experience. Another significant benefit of 5G networks is that they will have greater network capacity. This means that more devices will be able to connect to the network at the same time, without experiencing any slowdowns or connectivity issues. This is essential for the Internet of Things (IoT) devices that are becoming more prevalent in our daily lives, from smart homes to wearable devices.

5G networks promise to be a game-changer for wireless communication, delivering faster speeds, lower latency, and greater network capacity. With the potential to enable new applications such as smart cities and autonomous vehicles, the possibilities are endless.

Akash Patel
EC, II SEM



It's the beginning of machines taking over the world.



The Internet of Things (IoT) has revolutionized the way we interact with the world around us. It involves connecting everyday devices to the internet, enabling them to communicate with each other and with other systems. This technology has applications in areas such as home automation, industrial automation, and healthcare.

The IoT has opened new possibilities for home automation, making our lives more comfortable, convenient, and efficient. Smart homes are becoming increasingly popular, with devices such as thermostats, lights, and security systems connected to the internet and controlled through a smartphone app or voice commands. Industrial automation is another area where the IoT is making significant strides. IoT-enabled sensors and devices can be used to monitor equipment performance and detect potential issues before they become critical. This can help reduce downtime and maintenance costs, improving productivity and profitability. Despite the numerous benefits offered by the IoT, there are also concerns around data privacy and security. With so many devices connected to the internet, the risk of cyber-attacks and data breaches increases significantly. Therefore, it is crucial to implement robust security measures to protect sensitive data and ensure the safe operation of IoT-enabled devices. In conclusion, the IoT has the potential to transform the way we live and work, offering numerous benefits in areas such as home automation, industrial automation, and healthcare. While there are concerns around data privacy and security, these can be addressed through the implementation of robust security measures. As the IoT continues to evolve, it is essential to stay informed about the latest developments and take advantage of the opportunities it presents.

Aman Singh Rajawat
EC, II SEM

Never diagnosed the enemy before

Space warfare refers to the use of military technology in outer space, including both offensive and defensive capabilities. The idea of space warfare has been around since the Cold War, with both the United States and the Soviet Union developing space-based military technologies during that time. Today, several countries are developing space warfare capabilities, with some experts warning of the potential for an arms race in space.

One of the primary concerns surrounding space warfare is the potential for the use of weapons in outer space. This includes the use of missiles and other types of weapons that can destroy or damage satellites or another spacecraft. This could have significant consequences, including the disruption of global communications systems and the destruction of critical infrastructure.

Another concern is the potential for space-based surveillance and reconnaissance capabilities. This could allow countries to gather intelligence on their adversaries and monitor their activities from space, giving them a significant advantage in military conflicts.

In conclusion, space warfare is a growing concern, with several countries developing space-based military capabilities. The use of weapons in outer space could have significant consequences, including the disruption of global communications systems and the destruction of critical infrastructure. Additionally, the development of space-based surveillance and reconnaissance capabilities could give countries a significant advantage in military conflicts. As such, it is essential that international agreements are put in place to prevent the weaponization of space and ensure the peaceful use of outer space for the benefit of all humanity.

Anshul Rai
EC, II SEM



Smart is not just a word, it's an attitude.

Smart grid is an electrical grid that uses advanced technology to manage electricity distribution more efficiently and intelligently. This includes features such as real-time monitoring, automated controls, and energy storage. Smart grids are an essential component of the transition towards a more sustainable and resilient energy system.



Traditional electrical grids are often inefficient, with power generation, transmission, and distribution systems that are not well coordinated. This can result in power outages, high energy costs, and a significant waste of resources. A smart grid addresses these issues by leveraging technology to optimize the distribution of electricity and improve the overall efficiency of the electrical system. One of the primary features of a smart grid is real-time monitoring. This involves the use of sensors and other monitoring equipment to track energy usage and detect problems in the system. By constantly monitoring the grid, utilities can identify potential issues and take corrective action before they become more significant problems, such as power outages.

Another critical feature of a smart grid is automated controls. This allows the grid to adjust to changes in demand or supply of electricity automatically. For example, when energy demand is high, a smart grid can automatically adjust power generation to meet the demand, reducing the risk of power outages. Additionally, smart grids can help to manage the integration of renewable energy sources such as solar and wind power, which are often more intermittent than traditional sources of energy.

In conclusion, a smart grid is an electrical grid that uses advanced technology to manage electricity distribution more efficiently and intelligently. The adoption of smart grid technology offers numerous benefits, including increased reliability and resilience, reduced energy costs, and improved environmental sustainability. However, the implementation of smart grids also presents challenges that need to be addressed to ensure the successful transition towards a more sustainable and resilient energy system.

Ashwin Khasdev
EC, II SEM



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



Department Of Mechanical Engineering

I am delighted to address you through the pages of our yearly college magazine. Our department has had a fruitful academic year, and I am proud of the achievements of our students and faculty members.

Mechanical engineering is a field that has always fascinated and inspired young minds to explore the world of machines and systems. Our department is committed to providing an excellent education to our students, equipping them with the necessary skills to become successful professionals in the industry.

Our faculty members are experts in their respective domains and have contributed immensely to research and innovation in the field of mechanical engineering. They have published numerous research papers in reputed journals and have also received funding for their research projects.

Our students have also made us proud by participating and winning in various national and international competitions, presenting their research work in conferences and symposiums, and working on live projects. They have shown a remarkable level of dedication and hard work, and I am confident that they will continue to make us proud in the future.

I extend my warmest wishes to all our students and faculty members for their continued dedication and hard work, and I look forward to another successful year ahead.

Dr. Manish Joshi
ME (HOD)
TIT (Excellence)



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 society considering global challenges.

ME Glances





DEPARTMENT OF MECHANICAL ENGINEERING BATCH : 2018 - 2022





DAZZLING STARS

Academic Year 2021- 2025

Final Year



Ayush Mangalani
Topper



Mohd Sartaj Bania
2nd Rank



Sarthak Kumar
3rd Rank

Third Year



Rohit Kushwaha
Topper



Abhishek Chaturvedi
2nd Rank



Gaurav Sahu
3rd Rank

Second Year



Arun Kumar
Topper



Mithun Kumar
2nd Rank



Anurag Pandey
3rd Rank

First Year



Praveen
Topper



Prince Kumar Pathak
2nd Rank



Raghuvver Patel
3rd Rank



The Chilling Reality of Cryogenics: Can We Really Freeze Ourselves to Live Forever?

Cryogenic technology refers to the science of producing and utilizing low-temperature environments. Cryogenic systems operate at temperatures below -150°C (-238°F) and are used in a wide range of applications, from space exploration to medical research. Cryogenics is a fascinating field that has opened up new avenues for scientific discovery



and technological advancement. Cryogenic technology has revolutionized the medical industry. Cryopreservation, the process of freezing biological specimens, has enabled the long-term storage of tissues, organs, and other biological materials. This has led to advances in organ transplantation, tissue engineering, and stem cell research. Cryogenic systems are also used in medical imaging, such as magnetic resonance imaging (MRI), which uses superconducting magnets cooled by liquid helium to produce high-resolution images of the human body.

Cryogenic technology is also used in space exploration. NASA's International Space Station (ISS) is equipped with a cryogenic system that provides a controlled environment for scientific experiments in space. Cryogenic systems are also used in rocket propulsion, as liquid hydrogen and liquid oxygen are commonly used as rocket fuels.

The food industry also benefits from cryogenic technology. Flash freezing, which involves quickly freezing food products with liquid nitrogen or carbon dioxide, preserves the quality and freshness of food products. Cryogenic technology is also used in the production of frozen foods and in the transportation of perishable goods. In conclusion, cryogenic technology is a fascinating and rapidly developing field that has revolutionized many industries. From medical research to space exploration to food processing, cryogenic systems have a wide range of applications that have transformed the way we live and work. As the technology continues to advance, it is likely that we will see even more exciting developments in the future.

Amit Pawar
ME, II SEM



The Future is Now: How IIoT is Revolutionizing Industrial Operations

The Industrial Internet of Things (IIoT) is an extension of the Internet of Things (IoT) specifically tailored for industrial applications. IIoT is transforming the way industries operate, and it is quickly becoming the driving force behind Industry 4.0. The IIoT connects machines, equipment, and devices with software, sensors, and the internet,



creating a network of interconnected systems that communicate with each other in real-time. This technology enables the collection, analysis, and use of vast amounts of data to optimize industrial processes, increase productivity, reduce costs, and improve safety.

IIoT is the key to unlocking the full potential of industrial automation. The technology enables real-time monitoring of industrial processes, allowing for immediate adjustments to be made to optimize production. With IIoT, machines can be equipped with sensors that can detect and predict potential equipment failures, allowing for preventative maintenance before a breakdown occurs, minimizing downtime and improving efficiency.

IIoT is also enabling the development of smart factories, where every aspect of the manufacturing process is connected, and data is shared seamlessly between machines and systems. This integration enables factories to become more agile and adaptable, responding to changing demand quickly.

In conclusion, the Industrial Internet of Things is a game-changer for the industrial sector. IIoT is transforming the way businesses operate, creating new opportunities for optimization, efficiency, and growth. With the increasing availability of advanced technologies, such as machine learning and artificial intelligence, the potential of IIoT is only just beginning to be realized.

Atharva Sharma
ME, II SEM



Welding Technology: The Benefits and Advancements of Stir Friction Welding

Stir Friction Welding (SFW) is a solid-state welding technique that has revolutionized the manufacturing industry. This innovative technology has opened up new possibilities for welding materials that were previously difficult or impossible to join using traditional welding methods. SFW is a process that involves the rotation of one component while the other component remains stationary. The rotating component is then brought into contact with the stationary component, generating frictional heat, and resulting in plastic deformation of the material at the joint interface. The heat generated is sufficient to create a bond between the two materials.



SFW is particularly useful for joining dissimilar materials, such as aluminum to steel, which are traditionally difficult to weld together due to their different properties. The process also offers significant energy and time savings, as there is no need for preheating or post-weld heat treatment. The aerospace industry has been one of the primary adopters of SFW, with many leading manufacturers using the technology for the production of critical components. The automotive industry is also beginning to adopt SFW for the production of lightweight, high-strength components.

SFW has also found applications in the manufacturing of medical devices, as it allows for the welding of dissimilar materials with high precision and accuracy. The process has the potential to revolutionize the production of medical implants, such as orthopedic implants, which require high levels of precision and biocompatibility.

As a result, Stir Friction Welding is an innovative technology that is transforming the way we think about welding. With its ability to join dissimilar materials, offer precision, accuracy, and reliability, it is quickly becoming the go-to welding method for many industries. As new applications for SFW continue to be discovered, it is likely that the technology will become even more widespread and play a significant role in the future of manufacturing.

Shalani Kumari
ME, II SEM



The Impact of Industry 4.0 on the Future of Production

Industry 4.0 is a term used to describe the fourth industrial revolution that is currently underway. It is a fusion of digital technologies and physical systems that is changing the way we produce goods and services. Industry 4.0 is characterized by a high degree of automation, data exchange, and smart technologies that are transforming manufacturing,



logistics, and other sectors of the economy. The term Industry 4.0 was coined in Germany in 2011 and has since been adopted globally. It builds on the three previous industrial revolutions that started in the late 18th century with the introduction of steam power, continued with mass production in the early 20th century, and advanced with the use of electronics and computers in the 1970s.

Industry 4.0 technologies include the Internet of Things (IoT), Big Data, Cloud Computing, Artificial Intelligence (AI), and Robotics. These technologies are being integrated into the production process to create smart factories, where machines are connected to each other and to a central control system, allowing for real-time monitoring and analysis of production data. The benefits of Industry 4.0 are significant. It allows for greater efficiency in production, improved quality control, and reduced costs. It also enables companies to create new business models and revenue streams, as well as increased customization of products and services. Industry 4.0 is not just about technology. Collaboration between different departments within a company and across different companies is also crucial for successful implementation of Industry 4.0.

Industry 4.0 is a game-changing technology that is transforming the way we work and produce goods and services. It offers significant benefits in terms of efficiency, quality, and innovation, but also presents challenges that need to be addressed. The successful adoption of Industry 4.0 requires a collaborative effort between companies, governments, and workers to ensure a smooth transition to this new era of industrial production.

Atharva Wani
ME, II SEM



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)



Department Of Electrical Engineering

I am delighted to write this message as the Head of [Your Department] for our college's annual magazine. This platform provides an excellent opportunity to share our thoughts and experiences with the college community.

Our department has made remarkable progress over the past year, and it is a privilege to acknowledge the contributions of our students, faculty, and staff. We have undertaken several initiatives and activities to provide students with a comprehensive learning experience, and our faculty has worked tirelessly to maintain the high standards of our academic programs.

We are grateful for the support and guidance of our college administration and the dedicated efforts of the editorial team to bring this annual magazine to life. The team has done a fantastic job in capturing the essence of the college and providing a glimpse into the diverse experiences of our students and faculty.

As we move forward, we remain committed to our core values of academic excellence, innovation, and social responsibility. We will continue to strive for the holistic development of our students and the advancement of knowledge through research and community engagement.

In conclusion, I would like to express my gratitude to the editorial team for providing us with this platform to share our experiences with the college community. I would also like to extend my best wishes to the readers for a bright and prosperous future.

Dr. Ranjeeta Khare
EE (HOD)
TIT (Excellence)



Department of Electrical Engineering

Vision of the Department

To impart quality education in various fields of engineering, technology & management and to develop the institute into a centre of academic excellence.

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.

EE Glances





DEPARTMENT OF ELECTRICAL ENGINEERING BATCH : 2018 - 2022





DAZZLING STARS

Academic Year 2021-2025

Final Year



Ankesh Kumar
Topper



Shreyansh Kumar Sahu
2nd Rank



Brijesh Yadav
3rd Rank

Third Year



Abhinay Shrivastava
Topper



Ritam Ganguli
2nd Rank



Harshita Jha
3rd Rank

Second Year



Amit Rajput
Topper



Nikita Shakya
2nd Rank



Gajendra Rajput
3rd Rank

First Year



Ajay Kushwaha
Topper



Suleman Khan
2nd Rank



Prashant Kumar
3rd Rank



Shining a Light on the Future

Solar power generation is one of the most promising forms of renewable energy, offering a clean and sustainable alternative to traditional fossil fuels. The use of solar energy has increased significantly in recent years, and as technology continues to advance, solar power is becoming increasingly accessible and cost-effective.



Solar power generation is achieved through the use of solar panels, which are typically installed on rooftops or in large solar farms. These panels are made up of photovoltaic (PV) cells, which convert sunlight into direct current (DC) electricity. The DC electricity is then converted into alternating current (AC) electricity using an inverter, which is then fed into the electrical grid.

One of the primary benefits of solar power generation is its clean and renewable nature. Unlike traditional fossil fuels, solar power does not produce harmful emissions, making it a much more environmentally-friendly option. Solar power also does not rely on a finite resource, meaning it can continue to generate electricity indefinitely.

Solar power generation also has the potential to be cost-effective in the long term. While the initial investment in solar panels and installation can be expensive, the ongoing costs of maintaining and operating a solar system are generally much lower than those associated with traditional energy sources. Additionally, as technology continues to improve, the cost of solar panels and related equipment is likely to decrease, making solar power an even more affordable option.

In conclusion, solar power generation offers a promising alternative to traditional fossil fuels, providing a clean and sustainable source of energy that has the potential to be cost-effective in the long term. While there are some challenges associated with solar power, ongoing advances in technology and the increasing availability of solar panels and related equipment are helping to make this renewable energy source more accessible and practical for a wider range of applications.

Aman Nagar
EE, II SEM



Harnessing the Power of the Sun for Sustainable Energy

Solar Tower Technology is a renewable energy technology that harnesses the power of the sun to generate electricity. Also known as Solar Updraft Towers, this technology uses a combination of solar heat, air movement, and turbines to generate electricity. At its core, a solar tower is essentially a large greenhouse structure with a tall central tower.



The greenhouse is constructed with a large circular base that can measure up to several kilometers in diameter. The tower itself can be up to several hundred meters tall.

The greenhouse is covered with a transparent material, usually glass or plastic, that allows sunlight to pass through and heat the air inside. As the air inside the greenhouse is heated, it becomes less dense and begins to rise. This rising hot air is drawn into the central tower, creating a powerful updraft.

As the air rises, it passes through a series of turbines located at the base of the tower. These turbines generate electricity by converting the kinetic energy of the moving air into electrical energy. The electricity is then transferred to a power grid or stored in batteries for later use.

One potential drawback of solar tower technology is its reliance on sunlight. The effectiveness of solar towers can be impacted by weather conditions and the time of day, which can limit their ability to generate electricity consistently. However, ongoing research and development in the field is helping to improve the efficiency and effectiveness of solar tower technology.

In conclusion, solar tower technology offers a promising alternative to traditional fossil fuels, providing a clean and renewable source of energy that is highly scalable and adaptable to a wide range of applications. While there are some challenges associated with the technology, ongoing advances in research and development are helping to overcome these limitations and make solar tower technology a viable option for the future of renewable energy.

Akash Patel
EE, II SEM



Seeing the Unseen: The Fascinating World of Infrared Thermography

Infrared thermography works by detecting the heat radiation emitted from an object. Every object emits heat radiation, which is invisible to the naked eye but can be detected using infrared cameras. These cameras capture the infrared radiation and convert it into a visible image, with different colors representing different temperatures.



One of the primary benefits of infrared thermography is its non-contact nature. This means that temperature readings can be taken from a safe distance without the need for physical contact with the object being measured. This makes infrared thermography particularly useful for inspecting electrical equipment or other objects that may be hazardous to touch. Infrared thermography is also highly accurate, with the ability to detect temperature differences as small as 0.1 degrees Celsius. This level of accuracy allows for precise measurements and the ability to identify potential problems before they become serious.

One common use of infrared thermography is in building inspections. By mapping temperature patterns on a building's exterior, infrared thermography can identify areas where there may be energy loss or insulation problems. Infrared thermography is also commonly used in electrical inspections. By detecting temperature differences in electrical equipment, infrared thermography can identify potential hotspots or areas where equipment may be overheating. This can help to prevent equipment failures and reduce the risk of fire or other safety hazards. In conclusion, infrared thermography is a powerful technology that has a wide range of applications in fields such as building inspections, electrical inspections, and industrial maintenance. Its non-contact nature, high accuracy, and ability to detect temperature differences make it a valuable tool for identifying potential problems before they become serious. As technology continues to advance, the use of infrared thermography is likely to become even more widespread, offering even greater benefits for a wide range of industries and applications.

Deepak Chourasiya
EE, II SEM



Powering Up:

Exploring the Importance of Icing on Power Transmission Lines

Icing of power transmission lines is a common problem that can have significant impacts on the reliability and safety of the electrical grid. When transmission lines become coated with ice, it can cause power outages, equipment damage, and safety hazards. The formation of ice on power transmission lines occurs when the temperature drops below freezing and moisture in the air condenses on the lines. The resulting ice buildup can increase the weight of the lines and cause them to sag or break. Additionally, the ice can create a conductor that can cause electrical arcing, which can damage equipment or start fires. To prevent icing of power transmission lines, a number of strategies are employed. One common approach is to install anti-icing systems that use heat to prevent ice from forming on the lines. These systems may use a variety of heating methods, including electric resistance heating, hot air blowers, or chemical sprays.



Despite these efforts, icing of power transmission lines remains a significant challenge for the electrical grid, particularly in areas with cold and wet climates. In addition to causing power outages and equipment damage, icing can also create safety hazards for maintenance crews working on the lines. To address these challenges, ongoing research and development is focused on developing new anti-icing and de-icing technologies, as well as improving operational strategies to minimize the impact of icing on the electrical grid. These efforts are essential to ensuring the reliability and safety of the electrical grid, particularly in regions with cold and wet climates.

In conclusion, icing of power transmission lines is a significant problem that can have serious impacts on the reliability and safety of the electrical grid. Preventative measures such as anti-icing systems and de-icing methods, as well as operational strategies, are essential for minimizing the impact of icing on the electrical system. Ongoing research and development will be critical for developing new technologies and strategies to address this ongoing challenge.

Devasheesh Vardiya
EE, II SEM



Prof. Ritu Prasad

Education is not only about acquiring knowledge, it's about shaping oneself into a responsible citizen who contributes positively to society. As faculty, our role is not just to impart information, but to inspire and empower our students to become agents of change in the world.



Prof. Arjun Rajput

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.



Prof. Shalini Dubey

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.



Prof. Priya Patel

The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.



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. If you don't step forward, you're always in the same place.



Prof. Monika Raghuwanshi

The aim of the college, for the individual student, is to eliminate the need in his life for the college; the task is to help him become a self-educating man.



Prof. Aditi Purohit

The aim of the college, for the individual student, is to eliminate the need in his life for the college, the task is to help him become a self-educating man.



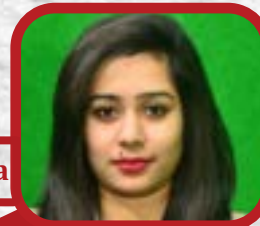
Prof. Bhavna Choubey

Months are different in college, especially freshman year. Too much happens. Every freshman month equals six regular months — they're like dog months.



Prof. Amar Nayak

Every child deserves a champion - an adult who will never give up on them, who understands the power of connections, and insists that they become the best that they can possibly be.

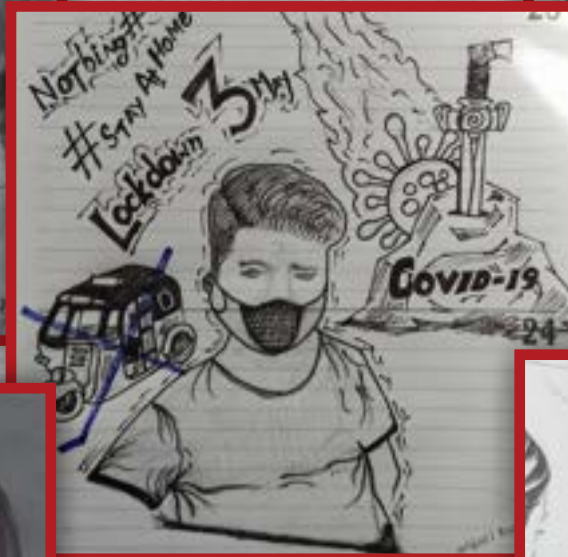


Prof. Savita Shrivastava

Believe in yourself and all that you are. Know that there is something inside you that is greater than any obstacle.



SKETCHES AND PHOTOGRAPHY





SPORTS GLIMPSES





NEWS FLASH

दैनिक भास्कर

होने वाले सभी वेब अडवर्ट्स में अपने लोगों से सम्बन्ध प्लेसमेंट सक्सेस में स्टूडेंट्स ने दिखाया हुनर, दी रंगारंग प्रस्तुति

दौड़ते हुए सभी वेब अडवर्ट्स में अपने लोगों से सम्बन्ध प्लेसमेंट सक्सेस में स्टूडेंट्स ने दिखाया हुनर, दी रंगारंग प्रस्तुति

दैनिक भास्कर

टेकनोक्रैट्स ने मनाया आजादी का अमृत महोत्सव

भोपाल: टेकनोक्रैट्स समूह ने आजादी का 75वां वार्षिक वर्षा में राष्ट्रीय स्तर पर आयोजित कार्यक्रमों में भाग लेने के लिए देश भर के छात्रों को आमंत्रित किया है। कार्यक्रम का उद्देश्य छात्रों में राष्ट्रप्रेम और राष्ट्रसेवा के भाव को जगाना है।

दैनिक भास्कर

के वीव पट्टी अग्निश्री भिन्ना अरवाज खान

अग्निश्री भिन्ना अरवाज खान को 'के वीव पट्टी' में शामिल किया गया है। यह कार्यक्रम छात्रों को नए अवसर प्रदान करता है।

दैनिक भास्कर

वे ही छोटे देश के कर्मचार बने: प्रवर्तितदिव्य विधिया

छोटे देशों के कर्मचारियों को प्रोत्साहित करने के लिए कार्यक्रम आयोजित किया गया है।

दैनिक भास्कर

17 नेशनल खेल चुर्चुर अंजना, अब किलिमिंजारो पर फहराएंगी तिरंगा

नेशनल खेल चुर्चुर अंजना में भाग लेने के लिए छात्रों को आमंत्रित किया गया है।

Look beyond a high-paying job, set bigger targets in life

Gov Asks Students To Work For Improving Society

छात्रों को केवल उच्च वेतन वाले नौकरियों के बजाय समाज के विकास के लिए काम करने के लिए प्रोत्साहित किया गया है।

यनेमिक आंत्रप्रेन्योर ऑफ ईयर अवॉर्ड सौरभ को

आईटी दिल्ली में हुआ स्टार्टअप अवॉर्ड-2018

सौरभ को 'यनेमिक आंत्रप्रेन्योर ऑफ ईयर अवॉर्ड' प्रदान किया गया है।

दैनिक भास्कर cityभास्कर

'रफ्तार' का लाइव कॉन्सर्ट 24 को

'रफ्तार' का लाइव कॉन्सर्ट 24 अप्रैल को आयोजित किया जाएगा।

टेकनोक्रैट्स और किस के वीव अनुबंध

टेकनोक्रैट्स और किस के वीव के बीच अनुबंध का उद्घाटन किया गया है।

का लाइव कॉन्सर्ट 24 अप्रैल को

'रफ्तार' का लाइव कॉन्सर्ट 24 अप्रैल को आयोजित किया जाएगा।

टेकनोक्रैट्स स्टूडेंट्स का शानदार प्रदर्शन

टेकनोक्रैट्स स्टूडेंट्स का शानदार प्रदर्शन का आयोजन किया गया है।

टीआइटी को हाईएस्ट प्लेसमेंट

टीआइटी को हाईएस्ट प्लेसमेंट का आयोजन किया गया है।

टेकनोक्रैट्स समूह का किया विजिट

टेकनोक्रैट्स समूह का विजिट का आयोजन किया गया है।

भोपाल। स्मार्ट इंडिया हैकार्थन में टेकनोक्रैट्स ग्रुप ऑफ इंस्टीट्यूशन की टीम ने दूसरा स्थान प्राप्त किया।

रविवार को हैकार्थन के समापन कार्यक्रम में सांसद आलोक संजय मौजूद थे। कॉम्पिटीशन में पहला पुरस्कार दिल्ली की टीम ने जीता। मध्यप्रदेश की विजेता टीम टेकनोक्रैट्स को पुरस्कार के रूप में 75 हजार रुपए प्रदान किये गए।

टीआइटी में ह से मनी बसंत

टीआइटी में ह से मनी बसंत का आयोजन किया गया है।

कताम रिस्क के अवसर और चुनौतियां

कताम रिस्क के अवसर और चुनौतियों का आयोजन किया गया है।



FUN & FESTIVITIES





COLLEGE IN ACTION





CELEBRITIES @ CAMPUS





Major Recruiters 2021-22 Batch

amazon 19 Feb. 2022	SAP 06 Aug. 2021	EY 25 Nov. 2019	amadeus 14 Feb. 2022	redhat 26 Nov. 2021	AIRBUS 08 May 2021	Deloitte 02 Feb. 2022	Infosys 22 Aug. 2021
ATC 26 Feb. 2022	Goldman Sachs 22 Aug. 2021	HEXWARE 01 Feb. 2021	TATA TECHNOLOGIES 23 Dec. 2021	Capgemini 23 Aug. 2021	VOLTAS 27 May 2020	Mphasis 09 Sep. 2021	DELL 28 Feb. 2020
FORCE MOTORS 19 Sep. 2020	BYJU'S 16 Dec. 2021	TATA MOTORS 17 May 2020	ASHOK LEYLAND 24 May 2020	Tech Mahindra 22 Jun. 2019	KPMG 26 Sep. 2020	TIGER ANALYTICS 20 Dec. 2021	GLOBAL 04 Nov. 2020
Mindtree 24 May 2021	ADP 30 Mar. 2022	HSBC 16 Dec. 2019	ACCOLITE 09 Jul. 2021	KYB conmat 20 May 2020	THERMAX 31 May 2021	Morgan Stanley 26 Jul. 2021	virtusa 30 Jul. 2021
BOSCH 28 May 2019	TEREX FINLAY 23 May 2019	DXC technology 04 Mar. 2020	wipro 25 Sep. 2021	TOMMY HILFIGER 09 Feb. 2022	paytm 13 Aug. 2019	TCS 12 Sep. 2021	TEKsystems 31 May 2020
ValueLabs 24 Aug. 2021	accenture 20 Apr. 2021	Calvin Klein 09 Feb. 2022	epam 31 Oct. 2021	NTT DATA 24 Nov. 2021	BNY MELLON 17 Oct. 2020	HCL 15 Dec. 2021	ZenSar TECHNOLOGIES 18 Jan. 2022

Technocrats Institute of Technology (Excellence), Bhopal is well known for its unbeatable placements in Central India. Our major recruiters are the prominent market-leading companies for the campus placements.

Shikhar

2022



TECHNOCRATS

INSTITUTE OF TECHNOLOGY (Excellence)

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