



Polyयांत्रिकी



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MANAGEMENT CORNER



Prof. (Dr.) Ankur Jauhari
Motivational Speaker & Life Coach
Director General (Academics)
IIMT Group of Colleges

The Silent Enemy of Success: How Incomplete Knowledge Holds You Back

We all know that knowledge is power, but its true power comes from being complete. Imagine setting out on a journey with only half of the map—feeling confident at first, but eventually realizing you're lost because you didn't have the full picture. This is the harsh reality of incomplete knowledge, something that's vividly illustrated in the Mahabharata through the story of Abhimanyu.

I've always been struck by Abhimanyu's story. Here was a young warrior—brave, bold, and full of potential. Trained by his father, Arjuna, to break through the deadly Chakravyuha formation in battle, Abhimanyu was unstoppable. But here's the catch: he was never taught how to exit the formation. When the moment came, he charged in with all his might, but once inside, he found himself trapped, surrounded by enemies with no way out. His incomplete knowledge led to his tragic downfall.

I remember a time in college when I thought memorizing facts for exams was all I needed. I breezed through subjects, ticking off each box and feeling confident in my abilities. But there came a point where that incomplete knowledge caught up with me—I couldn't apply what I'd memorized in real-world scenarios. It was a wake-up call that learning isn't just about cramming facts; it's about understanding the "why" and "how" behind those facts. True knowledge is about connecting the dots, diving deeper, and being fully prepared for whatever comes next. As I reflect on my own journey, it's clear that success isn't just about effort—it's about preparation. For students and youth, the lesson is clear: **never settle for half an answer**—Abhimanyu's tragic fate wasn't due to a lack of courage, but a lack of complete knowledge. And this isn't just a lesson for warriors on the battlefield—it's a lesson for all of us. The path to success, whether in academics, career, or personal growth, is paved with complete understanding. We mustn't settle for surface-level answers. We need to go beyond the basics and aim for mastery.

Success isn't just about effort; it's about complete preparation. Let Abhimanyu's story be a reminder that **the key to overcoming life's toughest battles is the pursuit of complete knowledge**. Only when you fully understand your path will you have the strength to walk it with confidence.



7 May'1861-
7 Aug'1941

"The burden of the self is lightened with I laugh at myself."
Rabindranath Tagore

IDEATHON 2024

Ideathon 2024, organized by the Civil Engineering Department at IIMT College of Polytechnic was held on October 25, 2024 at Vishveshwarya Hall. The event aimed to provide students with a platform to showcase their creativity, problem-solving skills, and innovative thinking by addressing real-world challenges using new-age technologies such as artificial intelligence, blockchain, and sustainable energy systems. Students from various disciplines, including Civil Engineering, Computer Science, and Mechanical Engineering, participated, with 20 teams registered and 10 shortlisted for final presentations. Teams were evaluated based on innovation, feasibility, technical knowledge, and presentation skills.



Students Participated in Ideathon

POSTER PRESENTATION

The Poster Presentation on Recent Innovations, organized by the Literacy Club and coordinated by Dr. Chitra Gupta, was held on 7th October 2024 at Vishveshwarya Hall, IIMT COP. The event aimed to foster knowledge sharing, engagement, and communication among participants by showcasing the latest developments and breakthroughs across diverse fields. Students presented their designs, ideas, and concepts visually, promoting discussions around advancements in literacy, education, technology, and community engagement. The event inspired creativity, improved understanding of current trends, and stimulated collaborative conversations about the future of innovation, allowing participants to connect with peers, mentors, and professionals.



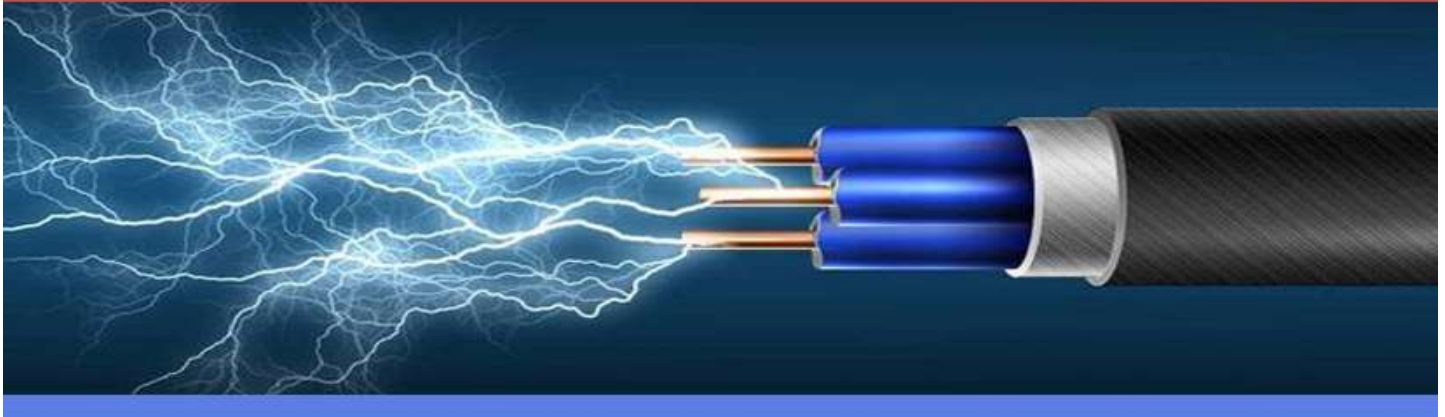
Students Honored with Certificates and Medals



7 May'1861-
7 Aug'1941

"Love is not a mere impulse, it must contain truth, which is law."
Rabindranath Tagore

Department of Electrical Engineering



INDUSTRIAL VISIT

An industrial visit to *Electronica India* and *Productronica India* was organized by the Department of Electrical Engineering for the 2nd and 3rd-year students of IIMT College of Polytechnic on **16th October 2024**.

The visit, aimed at providing hands-on experience in the real-time applications of electronics, semiconductors, and automation systems, was coordinated by Mr. Mirtunjay Kumar, Lecturer in the Department of Electrical Engineering. The event showcased key innovations in robotics, AI, IOT applications, PCB manufacturing, and 3D printing. Students gained valuable technical exposure and had the opportunity to network with industry leaders, inspiring further exploration in electronics, research, and innovation.



The poster is for an industrial visit organized by the Department of Electrical Engineering at IIMT College of Polytechnic, Greater Noida. It features logos for NBA (National Board of Accreditation), IIMT, and the event partners: electronica India and productronica India. The event is titled 'INDUSTRIAL VISIT INDIA EXPO MART' and is scheduled for Friday, 13th Sept, 2024, starting at 10:00 AM. The faculty coordinator is Mr. Mirtunjay Kumar (Lecturer), and the student coordinators are Priyanshu Rajak and Siddharth Kumar. The poster also lists sponsors: IPCA Expo 2024, MAT DISPENS, and SEMICON INDIA. Social media handles for IIMT and the group of colleges are provided at the bottom.

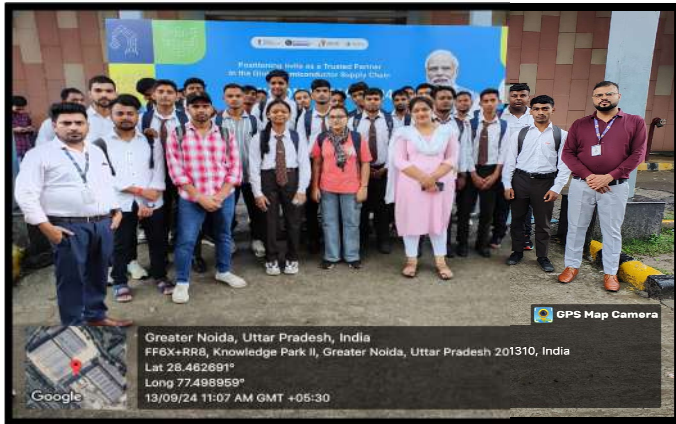


7 May'1861-
7 Aug'1941

"Bigotry tries to keep truth safe in its hand with a grip that kills it."
Rabindranath Tagore

HUNAR 2K24

On 16th October 2024, IIMT College of Polytechnic hosted a highly successful event, with a total of 155 students registered and 140 attendees. Among them, 30 participants were from outside the college, making the event even more diverse and engaging. The venue for this remarkable gathering was IIMT COP, which provided a conducive environment for the event. The event provided a dynamic platform for students to exhibit their diverse talents, ranging from technical skills to artistic and cultural performances. This aimed to foster a spirit of creativity and healthy competition among the students while offering them a chance to demonstrate their abilities in real-world scenarios. The event featured an array of competitions, each designed to showcase participants' talents.



Industrial Visit of EE Students at India Expo Mart



Felicitation of the Guest of Honor



Students Participated in Rangoli Competition



7 May'1861-
7 Aug'1941

"We live in the world when we love it."-Rabindranath Tagore

Department of Civil Engineering



INDUSTRIAL VISIT

On November 14th, the Department of Civil Engineering organized an industrial visit to Strings, located at Sector 12, Noida, Uttar Pradesh, 201301.

The visit was coordinated by Mr. Mainuddin Khan, Lecturer in the Civil Engineering Department. A total of 40 second and third-year civil engineering students participated in this insightful experience.

The industrial visit provided the students with a valuable opportunity to observe real-world working environments, including workstations, plants, assembly lines, machinery, and systems, while also allowing them to interact with highly skilled and experienced professionals in the field.



Industrial Visit of CE Students at Strings



7 May'1861-
7 Aug'1941

"Love's gift cannot be given, it waits to be accepted."-Rabindranath Tagore

GUEST LECTURE

On November 19th, the Civil Engineering Department of IIMT College of Polytechnic organized an insightful online session via Google Meet on "How to Plan a Startup: Legal & Ethical Steps," featuring the esteemed guest speaker, Dr. P. Prashant, an expert in Startup Strategy, Business Law, and Ethics. The event was part of the department's ongoing initiative to equip students with crucial skills and knowledge to foster their entrepreneurial ambitions. The session offered students a comprehensive understanding of the legal and ethical aspects involved in launching a startup. Over 40 students, along with faculty members, attended the session.

ALUMNI CONNECT

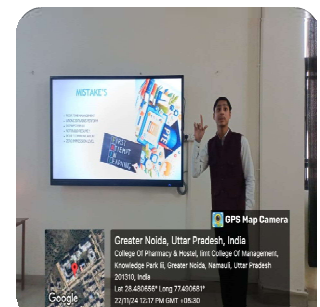
On November 22nd, the Department of Civil Engineering organized an Alumni Connect event titled "Industry Inside: Preparing for Real-World Challenges" at IIMT College of Polytechnic, Greater Noida. The event aimed to bridge the gap between academic learning and industry practice. It featured Mr. Prashant Singh, an alumnus from the 2021-2024 batch, who is currently working as a Quality Engineer at Ashtech Industries Pvt. Ltd. The session offered students valuable insights into the real-world applications of their studies and an opportunity to learn from Mr. Singh's professional journey.



Faculties & Students Attended the Online Guest Lecture



Felicitatation of the Alumni



PPT Presentation by Alumni



Department of Mechanical Engineering



INDUSTRIAL VISIT

The Industrial visit on Kisaan Die Tech Pvt. Ltd. was organized by the Mechanical Engineering Department on 3rd October 2024 in Ghaziabad. The main objectives were to understand the key operations and workflows within the company, identify operational or management challenges, explore the application of theoretical knowledge in real-world industry practices, and assess the use of technology and safety protocols.

During the visit, participants observed various stages of production, from raw material procurement to the assembly of dies. While the overall workflow was well-organized, some bottlenecks were identified in the cutting and shaping stages, where machine downtimes caused delays.

NBA NATIONAL BOARD OF ACCREDITATION

INSTITUTION'S INNOVATION COUNCIL (Ministry of Education, India)

IIMT COLLEGE OF POLYTECHNIC Greater Noida — Aim For Excellence —

Department of Mechanical Engineering (Maintenance)

is organizing

**EXPOSURE AND FIELD VISIT
FOR PROBLEM IDENTIFICATION**

At
KISAAN DieTech

Venue: Kisaan Die Tech Pvt. Ltd.,
Industrial Area Ghaziabad.

Thursday, 3rd October, 2024 | 10:00 AM Onwards

Coordinator
Mr. Kamal Kishor Sharma
(Sr. Lecturer ME-M)

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Industrial Visit of ME Students at Kisaan Die Tech



7 May'1861-
7 Aug'1941

"It is very simple to be happy, but it is very difficult to be simple."
Rabindranath Tagore

WORKSHOP

The Workshop on Intellectual Property Rights (IPR) and IP Management for Startups was successfully held on 8th October 2024 at Vishveshwarya Hall. It was coordinated by Mr. Awadhesh Kumar, Senior Lecturer. The workshop aimed to provide entrepreneurs and startup founders with essential knowledge about intellectual property (IP) and its effective management in the competitive startup ecosystem. Key topics covered included an overview of different types of IP such as patents, trademarks, copyrights, and trade secrets; the importance of IP in protecting innovations and gaining a market edge; developing an IP strategy; legal processes and regulatory requirements for IP protection; IP management tools; monetization strategies; and risk mitigation through enforcement and dispute resolution.



Felicitation of the Guests



Session Attended by Attendees

HACKATHON 2K24

The **Idea Hackathon 2K24** was successfully organized by the Mechanical Engineering Department on 26th November 2024, at Vishveshwarya Hall, starting at 11:00 AM. The event saw enthusiastic participation from students across various colleges, with 6 teams competing. The participants were challenged to present innovative solutions to real-world problems, fostering creativity, teamwork, and problem-solving skills. The event concluded with the following winners: 1st place – Krack-in from KIET Group of Institutions, Ghaziabad, 2nd place – Shadow Crew from G.L. Bajaj Institute of Management and Technology, Greater Noida, and 3rd place – The Hackanauts from IIMT College of Engineering, Greater Noida.



Awards and Certificates Distributed to the Participants



7 May'1861-
7 Aug'1941

"We come nearest to the great when we are great in humility."

Rabindranath Tagore

FACULTY CORNER**RAINWATER PURIFICATION: ENSURING
SAFE AND SUSTAINABLE WATER SUPPLY**

Rainwater purification is a sustainable method for converting collected rainwater into clean, usable water. This process involves several stages, including collection, initial filtration, sedimentation, advanced filtration, and disinfection. It provides numerous benefits, such as reducing dependency on traditional water sources, conserving natural resources, and mitigating flood risks. However, it also faces challenges such as initial setup costs and maintenance requirements. Properly implemented, rainwater purification can significantly contribute to water security and environmental sustainability. Rainwater purification is the process of collecting, filtering, and treating rainwater to make it safe for consumption and household use. This practice is gaining popularity due to increasing water scarcity, the rising cost of municipal water supplies, and the need for sustainable living solutions.

Rainwater purification transforms collected rainwater into safe, clean water for various uses, presenting a sustainable alternative to conventional water sources. This process is particularly beneficial in areas experiencing water scarcity and environmental degradation. In an era where access to clean water is becoming increasingly strained, innovative solutions are essential to meet the growing demand sustainably.

Rainwater purification emerges as a promising technique, harnessing nature's gift to provide a reliable source of potable water. This introductory exploration delves into the principles, methods, and significance of rainwater purification in addressing contemporary water challenges. Rainwater purification involves the collection and treatment of rainwater to make it suitable for various purposes, including drinking, cooking, and sanitation. Unlike traditional water sources, rainwater is abundant and freely available, making it an attractive alternative in regions grappling with water scarcity. The process begins with the capture of rainwater from rooftops or other catchment surfaces, directing it into storage tanks or cisterns.

However, rainwater purification is not without its challenges. It requires careful system design, maintenance, and monitoring to ensure efficiency and reliability. Factors such as rainfall variability, contamination risks, and initial setup costs must be considered when implementing rainwater purification systems.



Ms. Babita Pandey
B.Tech (CE), M.Tech
(Energy & Env.
Engineering)



7 May'1861-
7 Aug'1941

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**"By plucking her petals you do not gather the beauty of the
flower."-Rabindranath Tagore**

STUDENT CORNER

UNDERSTANDING BASIC ELECTRIC CIRCUITS

Electric circuits are the foundation of all modern electronic devices. From the Smartphone in your pocket to the complex systems that power entire cities, the principles governing electric circuits remain the same. This article explores the fundamental concepts of electric circuits, helping you build a solid understanding of their components, operation, and applications.

What is an Electric Circuit?

An electric circuit is a closed loop that allows electric current to flow. The flow of current is driven by a potential difference, or voltage, supplied by a power source such as a battery or generator. For a circuit to function, it must consist of three basic elements: **Power Source**, **Conductive Path** and **Load**. Understanding basic electric circuits is essential for anyone interested in electronics. By mastering these concepts, you'll be better equipped to explore advanced topics and create your own electronic projects.



Ravi Yadav
EE, III Year

GENERAL CORNER- QUIZ

General Knowledge Questions

1. Which animal is known as the 'Ship of the Desert'?
2. What is the National song of India?
3. Name the National tree of India?
4. Name the smallest continent in the world?
5. Name the largest mammal?
6. Name the place known as the Roof of the World?
7. Who is the first citizen of India?
8. How many union territory are there in India?
9. Name the first man to walk on the Moon?
10. Name the longest river on the Earth?

Answers of Previous Newsletter General Corner (Jul-Sept'2024)

1. Royal Bengal Tiger
2. Dr.Rajendra Prasad
3. Mahatma Gandhi
4. Pacific Ocean
5. Godavari River
6. Indian National Congress
7. Mercury
8. Seven Colours
9. Jana-gana-mana
10. Pingali Venkayya



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FROM THE



**EDITOR'S
DESK**

"We extend our sincere appreciation to our dedicated readers, whose engagement and support drive the success of our esteemed quarterly newsletter. We also express profound gratitude to our talented authors, whose innovative research enriches the scholarly discourse in our field.

Finally, we extend special thanks to our distinguished Editor-in-Chief for his guidance, leadership, and unwavering commitment to excellence.

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