

IIMT

COLLEGE OF POLYTECHNIC
Greater Noida

— Aim For Excellence —



NEWSLETTER

Polyयांत्रिकी



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Jan-March 2021



Apr-Jun 2021



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Oct- Dec. 2021



Jan- Mar. 2022

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MANAGEMENT CORNER



Dr. Suresh Prasad
Dean R & D
IIMT College of Polytechnic.

EMERGING TECHNOLOGIES

Emerging technologies are contemporary advances and innovations in various technological fields. These technologies offer a lot of scope for fundamental and applied research and development in different branches of science and engineering.

They will play a vital role in the modernization of industries by helping in digital transformation of enterprises. However, these are currently mostly used in manufacturing, energy and mobility markets. At present, some of the emerging technologies include artificial intelligence (AI), internet of things(IoT), cloud computing, block chain technology, augmented reality, 5G, 3D printing, and drones.

Artificial intelligence (AI) is the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. AI is also applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving as well.

Internet of Things (IoT) describes the network of physical devices “things”—that are embedded with sensors, software, and other technologies to connect and exchange data with other devices and systems over the internet.

Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power, without direct active management by the user. The term is generally used to describe various services provided by data centers available to many users over the Internet.

Block chain technology is most simply defined as a decentralized and distributed ledger that records the provenance of a digital asset.

Augmented reality (AR) adds digital content onto a live camera feed, making that digital content look as if it is part of the physical world around you. In practice, this could be anything from making our face look like a giraffe to overlaying digital directions onto the physical streets around us.

5G is the fifth generation of cellular technology. It is designed to increase speed, reduce latency, and improve flexibility of wireless services

3D printing is a process for making a physical object from a three-dimensional digital model, typically by laying down many successive thin layers of material. It brings a digital object (its CAD representation) into its physical form by adding layer by layer of materials.

This is replacing and may replace many technologies used for manufacturing a product today. Drones, also known as unmanned aerial vehicles (UAVs) or unmanned aircraft systems (UASes), is a flying robot that can be remotely controlled or fly autonomously through software-controlled flight plans in their embedded systems, working in conjunction with on board sensors and GPS.



BUSINESS MODEL COMPETITION (BMC -2022)



Business Model Competition (BMC -2022) was organised by IIMT Group on 5th may 2022. The convenor of the event was Mr. Umesh Kumar, IIMT College of Polytechnic and Supported by the Directors, Deans, Heads of Engineering, Management, Law, Pharmacy, Science & Technology and Coordinators from the respective colleges. Where all the colleges took active participation in this event.

THE AIM OF THE BUSINESS MODEL

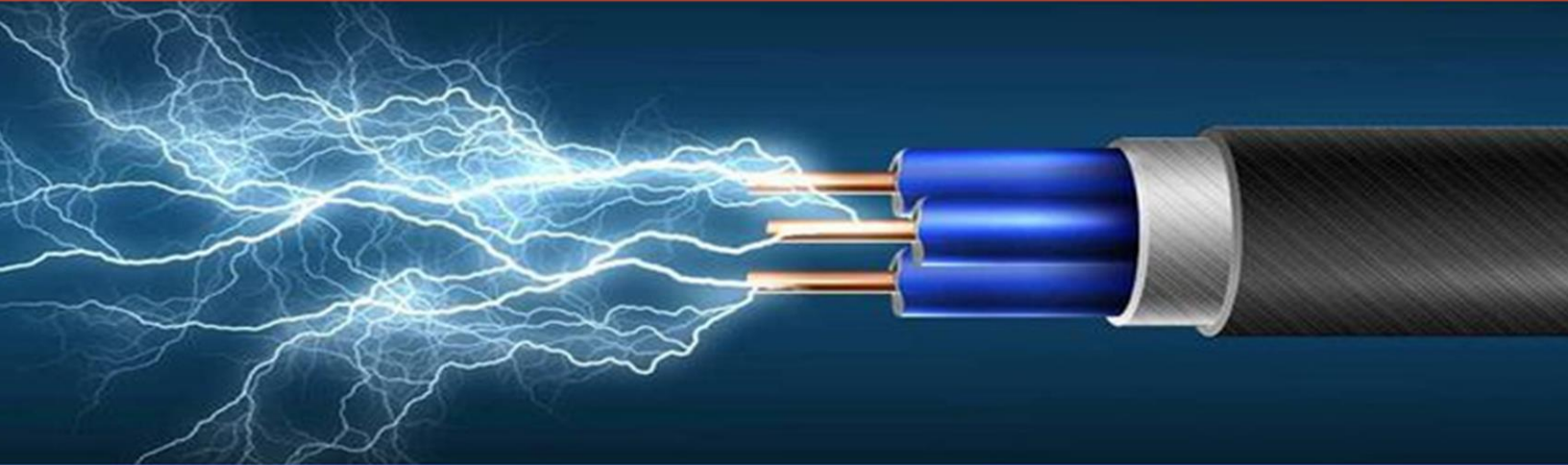
- To Discover New Idea an Business Strategy
- To Bring New Entrepreneurs
- Potential Business Model will be supported by IIMT Incubation centre*
- Awarding the best Business Model to Motivate young Minds
- Financial Support to the Potential Business Model Up to 10 Lakh*
- Cash Award
- Certificate will be given to all the participants with Ranking of the Business Model
- Judgment by the Experts



1st Prize Dhruv Agarwal, Pragyan School Greater Noida

Total 50 teams participated in the competition from IIMT and various external colleges and schools.

Department of Electrical Engineering

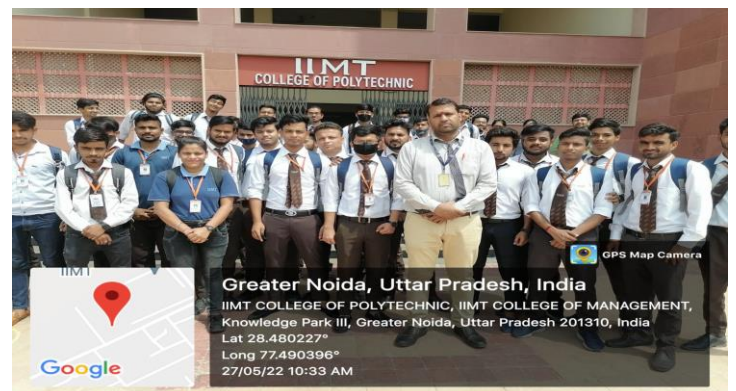


Industrial Visit

The Department of Electrical Engineering organized an industrial visit for one-day visit to E-FAB Power Control Pvt. Ltd., Greater Noida. This visit was organized on 27th May 2022 for 1st year, 2nd year and 3rd Year EE students. A total of 40 students visited the Centre. The visit was organized with the prior permission and guidance of Director Mr. Umesh Kumar, Dean Academic Dr. Bhaskar Gupta, Dean R&D Dr. Suresh Prasad and HOD of Electrical Engineering Department Mr. Achal Kumar. Faculty members (Mr. Mirtunjay Kumar, Mr. Dharmendra Kumar Sharma and Ms. Anshumann Anshu) coordinated the visit.

The One-day visit was organized with prior permission from to E-FAB Power Control Pvt. Ltd.,

The sessions conducted were very educational and gave the students the exposure as to how the industry and the outside market work. The students were benefited with the technical terms and the knowledge of how manufactured meter board panel, Electrical Control Panel, DG Synchronizing Panel, Bus Duct & Rising Mains, Cable Tray & Raceway, Feeder Pillar, Control Desk,



Group Photo: Industrial Visit

The one day workshop was conducted for the students of EE, one sessions from 1:30pm to 4:00pm. The invited speaker from CETPA Infotech Pvt Ltd., Noida delivered lecture and gave knowledge about training and internship opportunities in the domain of MATLAB and simulation

Ms Avneet Kaur , an expert in MATLAB and simulation at CETPA having rich experience in this area, delivered a talk on basic concept. She gave a detailed introduction to and discussed its impact in our day- to- day life.

The sessions held in the workshop were highly interactive and the participating faculty and students of the institute were greatly benefitted by the knowledge shared by the speaker.



Greater Noida, Uttar Pradesh, India
IIMT COLLEGE OF Polytechnic, Knowledge Park III, Greater
Noida, Uttar Pradesh 201310, India
21/04/22 02:09 PM

Photo: Welcoming guest by Dean(Academics)
& HOD - EE



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

IIMT
COLLEGE OF POLYTECHNIC
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Department of Electrical Engineering is organizing

Workshop On
"MATLAB & SIMULINK"

Ms. Avneet Kaur
Corporate Trainer, CETPA

Chandra Prakash
Business Developed Executive, CETPA

Date: 21st April, 2022 | Time: 01:30 PM Onwards
Venue: Vishveshwarya Hall, IIMT College of Polytechnic

Patrons

Prof. Umesh Kumar
Director
IIMT College of Polytechnic

Dr. Bhaskar Gupta
President, IIC Cell
IIMT College of Polytechnic

COORDINATOR
Mr. Mirtunjay Kumar
Lecturer, EE
IIMT College of Polytechnic

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Photo: Presenting Memento to the
guest by Director

Department of Civil Engineering



Alumni Connect

The Guest speaker of this event was Mr Sarfaraz (Alumni of CE 2018 pass out batch), shared his valuable knowledge to our students about “Entrepreneurial Skills, Attitude & Behaviour Development”. He shared his knowledge about current tools and technologies with students that impact on students to establish their goal in right manner. The students were very pleased to hear him, learn new tools and technologies in coming civil engineering world. Students know Basics of site knowledge and interview question. The alumni also shared their experiences in their college days and their journey from student to the present. He has received job from D'ART

Name of Alumni: Sarfaraz (CE 2018 Pass out)

Current Profile : D'ART design private Ltd.

Event Date & Time: 29-Nov-2021 (11:30 A.M to 12:30 P.M.)

Name of Alumni: Sarfaraz (CE 2018 Pass out)

Current Profile: D'ART design private Ltd.

No. of Attendees: 132

Description : An “Alumni Connect”, offline event organized by department of Civil Engineering on 29-Nov 2021 at IIMT college of Polytechnic.



Alumni Connect 2021
ENTREPRENEURIAL SKILLS, ATTITUDE & BEHAVIOR DEVELOPMENT by

Sarfaraz
Project Executive
Company : D'ART Design Pvt. Ltd
Venue: Vishveshwarya Hall

29 November, 2021 | 11:30 am Onwards

Coordinator Mr. Vikash Kr. Gautam | **President IIC** Dr. Bhaskar Gupta | **Director** Mr. Umesh Kumar

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Photo: Guest Speaker

Game Activity

Khokho was organised by the department of Civil on 20/04/2022. Co-Ordinator of the Activity was : Mr. Mainuddin Khan total 5 Team each of them 19 members were participated . Kho-Kho is a traditional Indian sports game, being one of the oldest outdoor sports dating back to ancient India.[1] It is one of the two most popular traditional tag games in the Indian subcontinent, the other being Kabaddi.[2] Kho-kho is played by two teams of twelve nominated players out of fifteen, of which nine enter the field who sit on their knees (Chasing Team), and three extra (Defending Team) who try to avoid being touched by members of the other opposing team.

WINNER'S OF THE ACTIVITY

- VAIBHAV KUMAR, EE 1st year - FIRST
- RITHIK KUMAR, CE 2nd year- SECOND



Department of Mechanical Engineering



Industrial Visit

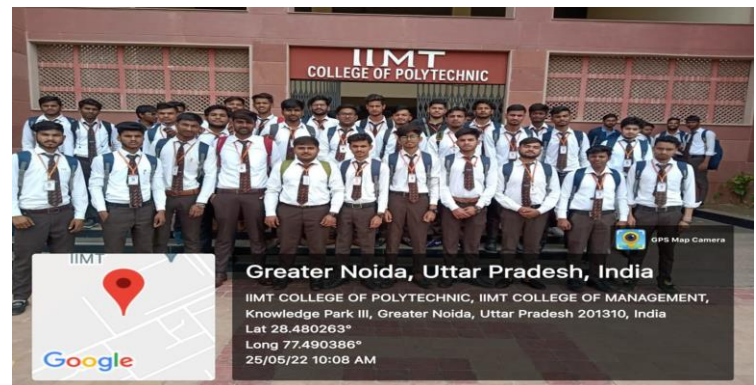
Industrial visit was conducted by Department of Mechanical Engineering .The industrial visit was held on 25 May 2022. Initially there was an oral presentation on the domestic and global opportunities for the diploma students & various other aspects of the Mechanical industry in India & abroad. There were eminent personalities like Mr. Akshay Kumar, who graced the occasion with their presence.

They also shed light on the various policies & steps taken in the direction to flourish the mechanical Industry & make it compete with the international market.

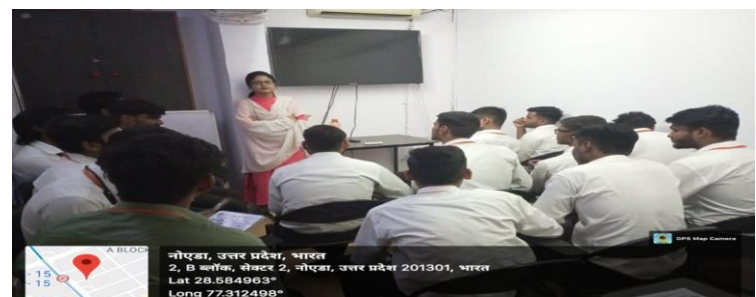
Thereafter at 11:15 AM we divided two groups of students were taken to the Industrial area to visit one by one. Company was involved in training of different courses related to robotics.

At our industrial visit students were able to learn about the following points:

- Introduction of Robot and its feature.
- Safety norms for industry work.
- 5S for Housekeeping.



IIMT College of Polytechnic, Greater Noida



PPT Presentation on New Education Policy

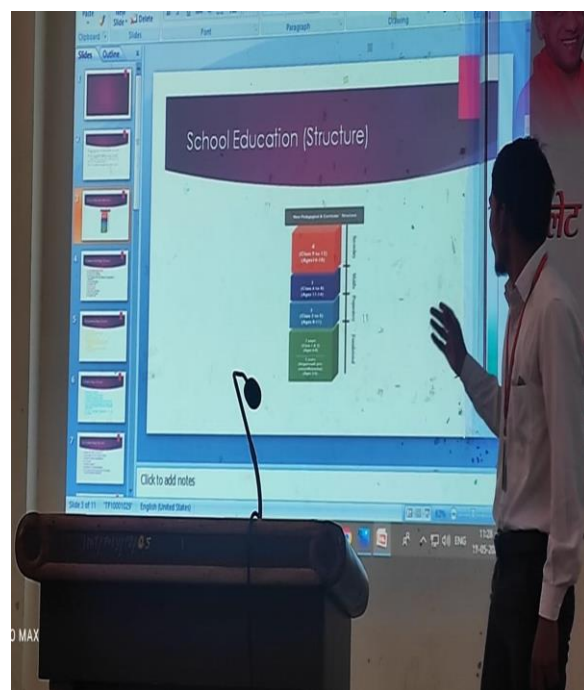
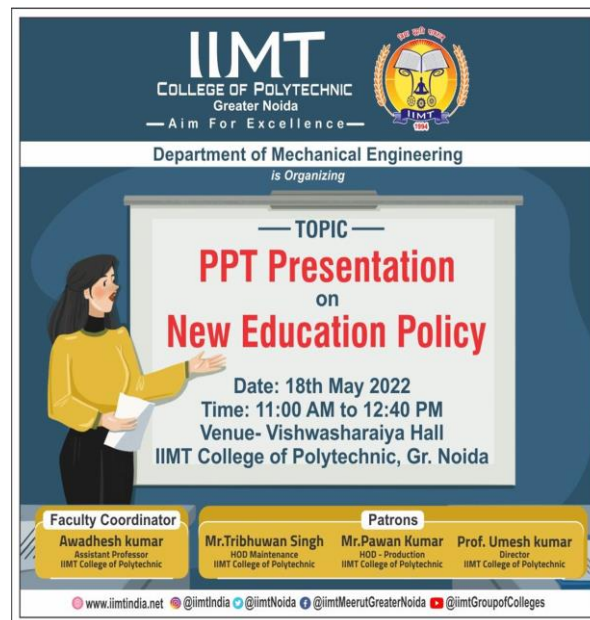
PPT Presentation on New Education Policy was organized by Mechanical Engineering Department on 18th May, 2022 under the coordination of Mr. Awadhesh Kumar, in which total 82 students and 12 faculty members were participated

The objective of the Topic of the ppt presentation on new education policy was relevant to area of interest of students was able to explain the more example of new education policy topic clearly & used relevant examples given by the Students was able to make the ppt and shows the Adult Education and Life-Long Learning, interactive & made me feel engaged. Student was able to positively influence my views towards (mention topic over here) in near future; I would like to improve the presentation skills.

The resource person for the Event, were students who present explains the different points of new education policy. They emphasized on Online and Digital Education: Ensuring Equitable Use of Technology. The students present about the topic mentioned through ppt presentation.

Learning Outcome: The ppt presentation on new education policy by the students focused on new methods of learning things. The session was highly interactive and reflected the related insights into the various advantages of using different types of education policy. The session was beneficial to the 2nd year and 3rd Year Polytechnic Mechanical Engineering Department students.

Overall development of students and they learned about the new education policy and its type related to Mechanical engineering which is helpful for their career growth.



Faculty Corner

❖ Achievement of the Faculty

Best Employee of The Month



Mrs Nishu Sharma
May, 2022

Steel bars embedded in concrete are called as 'reinforcing bars or reinforcement'. You can read what makes steel suitable for reinforced concrete here. Reinforcing bars are available in two major grades, mild steel and high yield strength steel. Steel fabric made from cold drawn steel wires welded to form a mesh is also used as reinforcement in RCC. Fiber reinforced concrete is also popular in construction industry.

By the way Plain concrete is strong in compression, but it is weak in bending. Too weak that its tensile strength is around one tenth of its compressive strength. When plain concrete member is subjected to bending, it develops cracks and ruptures. For the same reason plain concrete is not used where bending action can occur. Tensile strength is defined as the ability to resist bending forces. Bending forces causes tensile stresses in flexural members like beams and columns. Plain concrete when reinforced with steel, which is more than hundred times stronger than concrete in tension, the overall capacity of plain concrete in bending, is enhanced.

Reinforced concrete is used for all structural members subject to bending. From simple building components like Beam, Columns, Slabs, shear walls and Foundations to heavy structures like bridge piers, girders and dams are constructed with reinforced cement concrete.

REINFORCED CEMENT

CONCRETE (RCC)

Rajiv R Singh

HOD CE

IIMT College of Polytechnic



Reinforced Cement Concrete (RCC) is a composite building material consisting of structural concrete reinforced with a reinforcing material like steel. The most common reinforcement used is steel, due to its complimentary properties and it is called steel reinforced cement concrete or simply Reinforced Cement Concrete.

Student Article

Environmental
concerns and their
SolutionBy Kumari Aprajita
CE 1st Year

An environment is generally defined as the surroundings or conditions in which a person, animal or plant survives or operates. Our environment is constantly changing, and as our environment changes so does the need to become increasingly aware of the environmental issues that are causing these changes. With a massive increase in natural disasters, warming and cooling periods, and different types of weather patterns, people need to be a lot more cautious with the way they lead their lives in conjunction with the types of environmental issues our planet is facing. Some of the current environmental concerns that require urgent attention are:

Global Warming: The burning of fossil fuels, emissions from automobiles and chlorofluorocarbons add to the greenhouse gases in the atmosphere. This has led to an increase in the earth's temperature causing environmental changes. This increase in temperature across the globe is known as global warming.

Ozone Layer Depletion: The ozone layer is a layer of concentrated ozone gas. It protects us from the sun's harmful ultraviolet rays. This very important layer is being destroyed by CFCs (chlorofluorocarbons), which are used in industries and everyday life (e.g. aerosol cans). The chlorine in these compounds destroys the ozone layer. The hole in the ozone layer leaves humans and wildlife exposed to harmful UV rays resulting in several skin diseases including cancer.

Water Pollution: The introduction of harmful substances into rivers, oceans, lakes and ponds, which changes the physical, chemical or biological condition of the water, is called water pollution. The polluted water lacks oxygen and therefore the organisms die.

Air Pollution: Air pollution is the result of emissions from industries, automobiles, and the increasing use of fossil fuels. The gaseous emissions have added to an increase in the temperature of the earth. Not only this, but it had also increased the risk of diseases among individuals.

Solid Waste Management: Solid-waste management is defined as the discipline associated with the generation, storage, collection, transfer and transport, processing, and disposal of solid waste in a manner that it does not have a harmful effect on the environment.

Deforestation: Deforestation is the depletion of trees and forests at an alarming rate. The trees provide us with oxygen and several raw materials and also maintain the temperature of the earth. Due to the depletion of trees for commercial purposes, there has been a drastic change in the earth's climate.

Reviewer Page

We express sincere thanks to the reviewers of this newsletter for giving his/her precious, valuable and encouraged and voluble suggestions.



*IIMT College of Polytechnic is one of the best Diploma college which has taken such a great initiative to release the newsletter which is really important and resourceful for the students as well as for faculty members. I find this Newsletter Innovative and attractive with well draft and professional manner. **I wish all the best to the team Newsletter.***

Dr. Jitendra Kumar Nagar
Founder - ESDA

I am extremely glad to see such Innovative Newsletter. Newsletter is drafted with good information and attractive QR Code version. My heartiest Best Wishes to the Management and Editorial Board Team to come up with such innovative Newsletter which is the need of the current era.

Dr. Aparna Sethi
Founder – ProTouch





Editorial

Board Members

FROM THE

EDITOR'S
DESK

Dear Readers,

This thanks of note goes to all the contributors like Dean Academics, HoD's - Electrical, Mechanical, Civil, Event Coordinators, Faculty and students those who have contributed their articles to make this Newsletter complete. At the last but not least thanking to Director Sir for his guidance , vision and time.

PATRON

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Director

**CO-PATRON**

Dr. Bhaskar Gupta
Dean Academics

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