GEETANLALI INSTITUTE OF TECHNICAL STUDIES UDAIPUR

# MECHNOBLAZE

**EDITION** 

**VOLUME V ISSUE II JULY-DECEMBER, 2021** 

### INSIDE

- **Workshops**
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#### VISION: -

To impart comprehensive knowledge that enables the students to become innovative and successful entrepreneur to learn the advanced fields of mechanical engineering that meets the recent industrial demands and social needs..

#### MISSION: -

- To provide quality education to the students which will enhance their skills and ability to create, innovate and design systems based on new technologies for the society.
- To foster logical thinking among the students to design system required reallife situation.
- To equip the students through the stateof-art learning environment that can provide academic environment of excellence, entrepreneurship and moral guidelines with lifelong learning.

## DEPARTMENT OF MECHANICAL ENGINEERING

Department offers Mechanical engineering programs at the bachelor's and master's level. Its strong and interactive curriculum and hands-on learning makes the students capable of taking their career to the next level, whether it be in the professional engineering practice or in advanced studies. The department is focusing on high-quality teaching along with integrated laboratory experience.

The discipline of mechanical engineering effectively connects teaching of engineering education to active research in different areas. The department has the most modern infrastructure to undertake high-end teaching, research and developmental activities in laboratories.

Aim of Department's to provide our students with a perfect blend of intellectual and practical experiences that helps them to serve our society and address a variety of needs. With a solid grounding in the principles and practice of mechanical engineering, our undergraduates are ready to engage in ethical approaches to engineering, with concern for society and the environment. Our program at the postgraduate level aligns academic course work with research, to prepare students in specialized areas within the field of mechanical engineering.

The department has a team of highly qualified and experienced faculty.

# DIRECTOR'S DESK

## Dr. Vikas Mishra Director ,Gits



"Challenges are what makes life interesting and overcoming them is what makes life meaningful." I am very happy that Mechanical Engineering Department is releasing 5th Edition of "Mechanoblaze" as a forerunner of department activities. It is a technical platform to bring out the hidden talents of students and faculty. The major strength of the department is a team of well qualified and dedicated faculties who are continuously supporting the students for their academic excellence.

We have arranged several industrial visits and workshops for our 2nd, 3rd and 4th year students in this semester. The seminars held have been enlightening for both the students and the faculty. The workshops have made our students professionally competent with huge moral values, ethics and leadership qualities that would enable them to serve the society in the best possible manner.

The students have not only academically excelled but have also gained excellence in sports and other extracurricular activities.

The GITS family is an ever increasing family and I feel proud to be a part of it. Congratulations to all the students who have excelled in various fields and good luck to those who are on their way to achieve success.

## **DIRECTOR'S DESK**

## Dr. SUDHAKAR JINDAL Director .(IQAC) Gits



"Be a person not a machine. Don't accumulate degrees rather inculcate ethics and values." As a director, I am elated that the Mechanical Engineering Department of Geetanjali Institute of Technical Studies is releasing the 5th edition of 'MECHNOBLAZE' as a forerunner of department activities.

In the age of globalization, to build a truly different institution of engineering and technology in Udaipur, an institution with a marked difference in quality to serve the local people in global arena. Our aim is to build an effervescent community of engineers, where faculty and students are cronies in a mutually inspirational education process, engrossed in learning

The career prospects of the engineers and technologists are wide-ranging and fulfilling. A well-trained engineering graduate will be equally competent in research and professional positions, drawing upon his analytical, practical and problem- solving skills. But we aren't just about the technology.

We look for, and develop creative problem solving strengths in our students; at the same time, we encourage students to grow as effective team players, with a strong set of ethics, communications skills and zeal to outshine.

## HOD'S DESK

## Dr. Deepak Paliwal



Casting the world, Forging the campus, Shaping the universe, Welding the rest of all branches, Bcoz, We are the Men, We are the machine, and we are Mechanical Engineer's. It gives me immense pleasure to lead the department of Mechanical Engineering .Our college is one of the premier institutions in the region, unique like a prism reflecting the manifold shades of learning and co-curricular activities. Geetanjali Institute of Technical Studies is striving hard towards the goal of providing innovative and quality education with high standard to achieve academic excellence.

The motto of our department is to provide quality education. The process of learning is extremely important in life. What you learn, how you learn and where you learn play a crucial role in developing ones intellectual capability, besides career. The excellent infrastructure, teaching faculty of the best kind ensuring quality education such as interaction among students, parents and staff, along with a Training and Placement Cell ensures a bright future to its students. Thus we are confident that our Engineers will emerge as assets not only to this institution and to the organization they belong, but also to the country at large.

## **EDITOR'S DESK**



### SUCCESS IS NO ACCIDENT.

"It is hard work perseverance, learning, studying, secrifice and most of all,love of what you are doing "

It gives me an immense pleasure to introduce this Newsletter of Mechanical Engineering Named MECHNOBLAZE, means Enlightening Mechanical .By presenting this Newsletter, wish to provide you the grateful to our same . I am honourable Director sir and HOD sir who gave this opportunity . It has been a learning experience to all of us . I am thankful to all staffs for their co-operative nature. At last but not least I am thankful to all those helped directly and นร indirectly.

Mr. NARENDRA PATEL (Assistant professor) DEPARTMENT OF MECHANICAL ENGINEERING

MECHNOBLAZE

# **Engineer's Day Celebration**

Students of Mechanical Engineering department celebrated engineer's day in memory of Mokshagundam Visvesvaraya on 15 September 2021. Students of final, third & second year along with departmental faculties and other technical as well supporting staff were also present in this celebration.

Students planned up various activities in the form of Quiz, extempore, one min talent show etc. for everyone to enjoy the celebration. Departmental faculties also motivated the students by sharing their knowledge & experiences as a worthy engineer professionally.

Dr. Deepak Paliwal, Head of Mechanical Engineering also encouraged the students with the various teachings of Mokshagundam Visvesvaraya & also stated that we should be focused & determined of our goals irrespective of other environmental & non supporting condition



**MECHNOBLAZE** 

# II & III Year In house Training-2021

Department of Mechanical Engineering has conducted In house technical training for the students of II Year students on "CNC Machine and its programming from 13/9/2021 till 30/9/2021.

Training was taken over by Mr. **Honey Lohar**, Technical Assistant, ME. Students were taught basics of CNC Machine in a very illustrative manner. Various parts & working process of CNC machine according to mechanical job preparation was also taught to the students in a sequenced manner.

Students also discussed their issues & resolved their queries in a very enthusiastic manner.

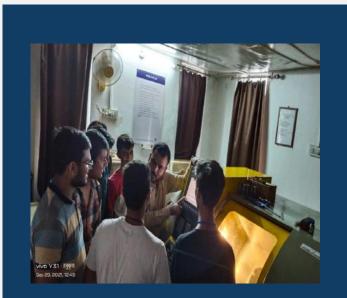
Department of Mechanical Engineering has conducted In house technical 6 Days training for the students of III Year students on "Mechanical Concepts" in which students learned various technical concepts of Theory of Machines, Dynamics of Machine& Fluid Machines as per the training schedule.

The training started from 8/9/2021 till 23/9/2021.

Training on Theory of Machines & Dynamics of machine was taken over by *Mr. Rahul Sen*, Assistant Professor, ME& training on Fluid Machines was taken over by *Mr. Ram Dayal Kumawat* Assistant Professor, ME &*Dr. Vishnu Agarwal*, Associate Professor, ME.

According to the schedule of training students were firstly taught the basics of the particular topic & then were allowed to perform practical using the experimental model for the same topic.

Students also discussed their issues & resolved their queries in a very enthusiastic manner.





## Vishwakarma Jayanti Celebration

Mechanical Engineering Department of Geetanjali Institute of Technical Studies celebrated Vishwakarma Jayanti on 17th September 2018. An auspicious moment of prayer to pay obeisance to Lord Vishwakarma, who is regarded as the god of architecture and engineering, was organised in the workshop of Mechanical Engineering department at 1:30 PM. It was a resolution time for students and faculty to dedicate themselves to the cause of advancement of technology and gain divine inspiration for creating novel products. According to Hindu mythology Lord Vishwakarma is the divine draftsman of the whole universe and the official builder of all the gods' palaces and the designer of all celestial vehicles and weapons. Load Vishwakarma has four hands, wears a crown, loads of gold jewellery, and holds a water-pot, a book, a noose and craftsman's tools in his hands and is described as the God with multi-dimensional vision and supreme strength by Rig Veda.

Pooja and Celebration was attended by Director GITS, Prof Vikas Misra, Finance Controller, Shri. B L Jangir, Director IQAC Prof. Dr. Sudhakar Jindal, Dean Testing and Consultancy, Prof. Manish Verma, Head Computer Science Engineering, Dr. Mayank Patel, Head Mechanical and Automobile, Prof. Deepak Paliwal along with all staff members and students from various departments.



## Student club Activity

In the month of September, Mechanical Engineering students participated in various competitions & Internships. All these students were mentored by Ms. Surbhi Mishra, faculty Mechanical Engineering Details of student participation is as follows:

S.N	Particulars	Description
1	Student participation in Online awareness programme on <i>CII &amp;</i> <i>iPATE</i> .	An awareness programme jointly organized by AICTE & Confederation of Indian Industry to measure the industry readiness of engineering graduates on 21 <sup>st</sup> September 2021.Students registered themselves for the programme through google form.
2	Students participation in <i>"Innovesta</i> "	An event Jointly conducted by NIT Jalandhar & Institutions Innovation Club on $25 - 26$ September 2021.In this event, Students have presented themselves on various "Innovesta tracks" which were provided by them via google meet link.
3.	Students participation in Microsoft Virtual Internship	A future ready talent programme organized by Microsoft to train students on data artificial intelligence, Cloud computing, cyber security and other technical skills. In this internship program students have enrolled themselves for the first batch to be started from 6 <sup>th</sup> October 2021.
4	Students participation in Departmental <b>Research</b> & Innovation (R& I) Cell	Department of Mechanical Engineering has R & I Cell mentored by <i>Dr</i> . <i>Vishnu Agarwal</i> . R&I Cell members consist of 4 departmental faculties namely, <i>Dr. Sauarbh Tege, Ms. Surbhi Mishra, Mr. Rahul Sen, Mr. Udai Singh Chouhan</i> & 19 students at present. Students have come up with innovative the ideas & are working on their project proposals. Latest meetingtook place on 30 <sup>th</sup> September 2021.

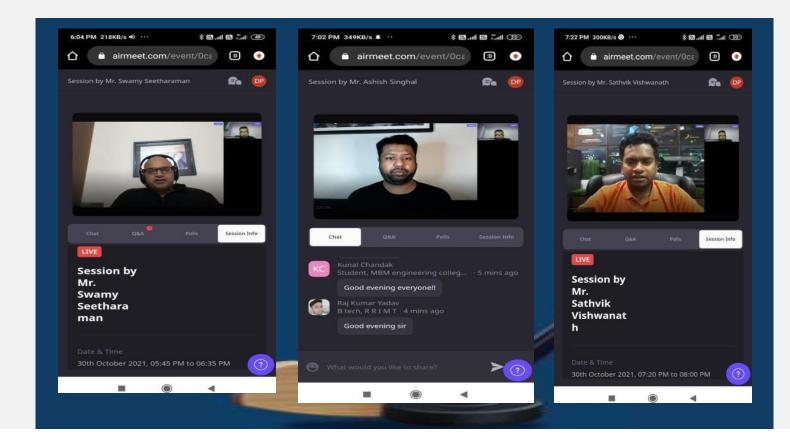
## **Entrepreneurship Awareness Drive**

GITSIANs (Students from all branches) participated on 30<sup>th</sup> October 2021 in evening (from 5:45pm -8pm) in Entrepreneurship Awareness Drive conducted by IIT Kharagpur(As per GITS & IIT KGP MoU).

The sessions were taken over by **Mr. SwamySeetharaman**, Lead (Engineering & Data), CRED & he addressed on topic of Creativity vs. Executionin starting up, **Mr. Ashish Singhal**, Founder & CEO, CoinswitchKuber, and he addressed on Making Money Equal for all through crypto &**Mr. SathvikVishwanath**, Founder & CEO, Unocoin.

At the end of each session, students inquisitively raised their queries which were resolved by session wise speakers. Students received certificate of Partcipation from IIT – KGP.

GITS – Innovation & Incubation Cell ( GITS –IIC) took the initiative to motivate the students to get registered & participate for this awareness drive. This event was a self driven activity for GITS –IIC Cell , which was mentored by Head Mechanical , Dr. Deepak Paliwal



## Workshop on Sensor Guided Robotics

The programme started with lamp lighting by Dr.VikasMisra, Director(GITS), and Dr. Deepak Paliwal, HoD (ME), GITS. Dr.Deepak Paliwalwelcoming to Dr.Vikas Misrawith a bunch of flowers. In welcome speech Prof(Dr.) VisasMisra, Director(GITS) shared his views with the participants that if they wants to develop themselves, then attending such workshop would enhance their technical skills. Dr. Deepak Paliwal, HoD (ME), GITS welcomes all and brief the importance of Robotics and Automation.

The Workshop covered the fundamental understanding of Sensor Guided Robotics from basic level. Different components & wiring of robot and programming of Arduino UNO were explained in detail with live demonstration. Also teach hoe to use the Proteus Simulation Software.

Students develop 3 different basic autonomous robots which are guided using sensors. The first robot will be a line follower which is programmed to follow a line. This robot detects the path using infra- red sensors which work on the principle of reflection of light. Using the same sensors, Student also develop robots that can avoid obstacles and edge.

Inhouse expert Ms. Manisha Joshi explained about Arduino & Arduino Board Description, Different types of Sensors, Programming & Algorithm Analysis. Mr. Abhishek Joshi explained Proteus Simulation Software & Basic gates simulation on Proteus, Arduino with Proteus.

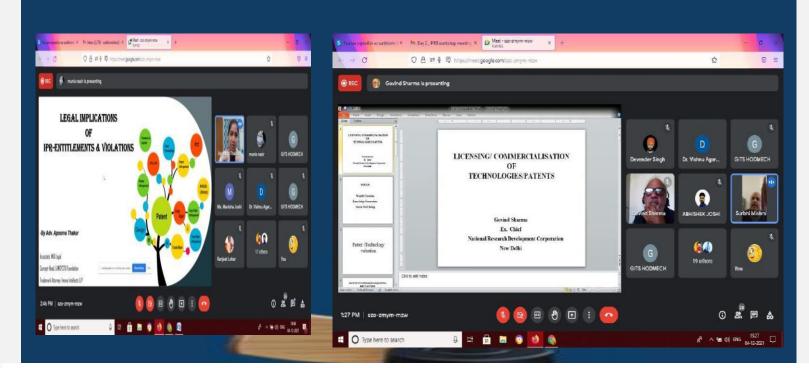


# Two days workshop on Intellectual Property rights for research.

Two days national workshop on Intellectual property Rights for research was organized by Department of Mechanical Engineering from 3<sup>rd</sup> Dec to 4<sup>th</sup> Dec 2021. The workshop was inaugurated with welcome address from Dr. Vikas Misra Sir, Director GITS & wise words from Dr. Sudhakar Jindal Sir, Director IQAC. Dr. Deepak Paliwal, Head

Mechanical engineering presented brief of the workshop to the participants. Workshop comprised of two sessions each day of One hour duration.

- Speaker of the session was Mrs. Pooja Kumar (Registered Patent Agent Government of India). She delivered her session on *MSME Legal Patent Filling Process*.
- Speaker of the session was Mr. Satish Kumar (Registered Patent Agent Government of India). He delivered his topic on "*Technology Transfer & Commercialization*"
- Speaker of the session was Adv. Apoorva Thakur ,.She is advocate & NET Qualified Assistant Professor (Law). She delivered her lecture on *Legal Implications of IPR -Entitlements & Violations*.



## Student Participation at Institute of Engineers, India, -Udaipur Chapter





ME Students from II & III Year, participated & presented in One Day seminar (screening) on " Emerging Trends in Sustainable Manufacturing and Energy Systems" Organized by Institute of Engineers , (India), Udaipur Local Chapter, under the aegis of Mechanical Engineering Division. Initially, in the first round, students were screened on 13th of December 2021 & in the Second Round on 19th December 2021 only screened students participated. There were 9 teams from GITS; Total of 18 Students participated in First round. Only Two teams (4 students) got selected for second round. Overall there were 17 teams from different engineering colleges of Udaipur. Faculty Coordinator were Dr. Vishnu Agarwal (Professor, Mechanical Engineering, GITS) & Mr. Abhishek Joshi (Asst. Mechanical Professor, Engineering, GITS). GITS Team Members Devendra Singh & Manvendra Singh from II Yr ME stood first in theme 1 (3D Printing Technology : A future of manufacturing). Manvendra was also appreciated for his outstanding presentation performance. Another team members Divyankar Sharma & Jatin Veerwal from II Yr ME stood second in Theme 1 (Electric Vehicle : A clean system of Automobiles.)

# Congratulations to ME Faculty Members for Outstanding Performance

- Prof. (Dr.) Sudhakar Jindal has delivered expert talk on "Biodiesel : Making & Testing" in two weeks online FDP on Alternative energy Sources for Sustainable Development at Delhi Technical University
- Dr. Deepak Paliwal has successfully completed NPTEL course on "Failure Analysis & Prevention" offered by IIT Roorkee.
- Dr. Vishnu Agarwal has successfully completed NPTEL course on "Mechanics of Machining" offered by IIT Guwahati and "Strength of Material" offered by IIT Kharagpur "Heat Exchangers: Fundamental and Design Analysis" offered by IIT Madras
- Dr. Saurabh Tege has successfully completed two online courses a. Lean software development offered by University of Minnesota b. Getting started in Google Analytics "Coursera project work"

He has also wrote a book chapter on "**Integrating lean green technique through single combined strategy in marble industry** And training on Six sigma : Lean six sigma Black belt (Part 1) by Advanced Innovation Group Pro Excellence



# Proud moment for gits as it has been recognized as a research centre in mechanical engineering program for rtu.kota.

The Research Board of RTU approved four faculty members of Mechanical Engineering department ,GITS as Research supervisors from session 2021-22.

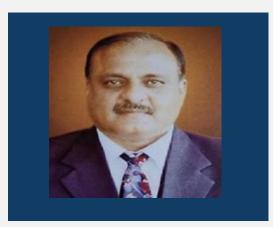
- Dr. Vikas Misra , Director GITS
- Prof. (Dr.) Sudhakar Jindal
- Dr. Deepak Paliwal
- Dr. Vishnu Agarwal

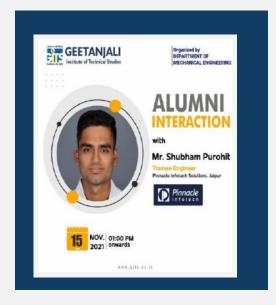
## **Industrial Visit**

An industrial visit for the students of Second Year & Third Year was organized at **Taanj and** Pacific industries Ltd , Udaipur about 20 km from GITS on 30<sup>TH</sup> November 2021 .The students gained a real life learning on various manufacturing processes & production technology. Two faculty members Assistant Professor Md. Zuber khan and Assistant professor Mr. Rahul Sen accompanied the students .



# Expert Lecture/ Alumni Talk Award and Recognition





An interactive alumni talk was organized in the department on 15 Nov. 2021 with Mr. Shubham Purohit from the batch of (2013-17). Presently he is a trainee engineer in Pinnacle Infotech Solutions, Jaipur. Prof S. Jindal delivered an expert talk on Alternative Energy Sources at IE(I) Udaipur on 15<sup>th</sup> Dec 2021.

**Prof. S. Jindal** awarded prestigious national award -HK Firodia award (2020) from IIIE for his outstanding contributions to the field of Industrial Engineering

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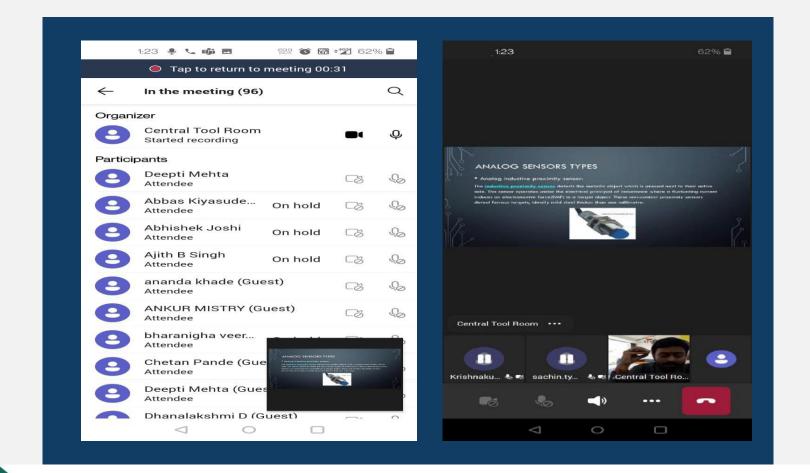
Memorandum of Understanding (MoU)

#### MECHNOBLAZE

Mechanical engineering department faculty members have proactively attended faculty Development Programs and workshops in between July 2021 to Dec 2021. The prime focus is to enhance functional area expertise both as a teacher and trainer.

- 8 Faculty members have participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP.
- 7 Faculty members have participated in Two Days National Workshop on Business Management and Improvement Through ERP An Only Path for Global Business.

2 Faculties have participated in Two Days National Workshop on Problem Solving



#### **MECHNOBLAZE**

## 45 Hrs Training on AutoCAD

- AutoCAD is a software application which helps mechanical engineers in drafting two and three-dimensional models with the help of computers. Training on AutoCAD is a beyond the syllabus activity, which every year department organizes to cater the needs of todays industries by providing skilled mechanical engineers (with the knowledge of AutoCAD) to them.
- Department has organized 45 hours training to second yr third semester students in the month of October and November. The trainers were Mr. Abhishek Joshi and Ms. Manisha Joshi. The final evaluation of AutoCAD learning was done by CADCAM Experts Udaipur.

## Course summary:

- Introduction to Robotics
- Actuators and Power Supplies
- Building and Operating Simple Manual Robots
- Wireless Technology to build Wireless Robots
- Programming & Algorithm Analysis
- Sensors
- Embedded Systems & microcontroller Programming
- Build and Operate Simple Autonomous Robots
- Surface modelling







## 45 Hrs Training on Robotics offered to III yr VIsem Students

- Robotics is the art of making robots, machines that combine concepts from multiple engineering disciplines. Training on robotics is a beyond the syllabus activity, which every year department organizes to cater the needs of todays industries by providing skilled mechanical engineers (with the knowledge of robotics) to them.
- Department has organized 45 hours training to third yr sixth semester students in the month of October and November. The trainers were Mr. Abhishek Joshi and Ms. Manisha Joshi. The final evaluation of robotics learning was done by the department only through the dismentalling and assembling of robotic kits available in the department.

#### Course summary:

- Introduction to Robotics
- Actuators and Power Supplies
- Building and Operating Simple Manual Robots
- Wireless Technology to build Wireless Robots
- Programming & Algorithm Analysis
- Sensors
- Embedded Systems & microcontroller Programming
- Build and Operate Simple Autonomous Robots
- Surface modelling



# **Academic Topper**

Following students earned HONOURS DEGREE with extra credit from NPTEL Certification courses



**Bhavesh Mali** 



Vishal singh



Shubham Kumar



Deepak Soni



Ayan Khan



Arjun



Manish Choudhary\_



Shristhi Kalal



Darshan Deora



Amit Singh Rathore

### VIII SEM

ROLL NO	NAME OF STUDENT	PERCENTAGE
17EGIME004	ARJUN	71
17EGIME0011	DEEPAK SONI	70.3
17EGIME006	LOKESH KUMAR	68.8

#### VI SEM

ROLL NO	NAME OF STUDENT	SGPA
18EGIME013	BHUVNESH MEWARA	9.33
18EGIME003	SHIVANSH VAISHNAV	8.98
18EGIME060	PURAN JAT	8.86

## ACADMIC TOPPERS OF ODD SEMESTER RESULTS

# **Placements**







Date:- 24-11-2021

Deepak Paliwal

Kartik Khatik

# Pinnacle



Date:- 16-12-2021



**Gautam Rathore** 

**Bhuvnesh Mewara** 



Date:-09-10-2021



**Piyush Jamoliya** 



Shoeb Akhtar Qureshi



Hari Pratap Singh



Date:- 27-12-2021



**Bhuvnesh Mewara** 



Vikas Ajmera



**Bhavesh Paneri** 

MECHNOBLAZE

## **Placements**

