







MECHNOBLAZE

EDITION

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DEPARTMENT OF MECHANICAL ENGINEERING

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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



"Challenges are what makes life interesting and overcoming them is what makes life meaningful."

I am very happy that Mechanical Engineering Department is releasing 2nd 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.

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, sacrifice 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 same . I am grateful to our 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 us directly and indirectly.

Mr. NARENDRA PATEL

(Assistant professor)

DEPARTMENT OF MECHANICAL ENGINEERING

All Vehicles must be automated

To enhance the overall personality, vocabulary, technical skills, communication skills of the students of II, III, & IV Year Mechanical & Automobile engineering students, various departmental activities have been planned for them. These intra -departmental activities are planned for every Saturday of the month for the students. These activities are being conducted as per their departmental calendar of activities .The very first activity of the department was Debate Competition which was conducted on first Saturday of August i.e. on 4 /8/19. Under the banner of **Society of Innovative Engineers for Automobile & Mechanical –SINE-AM**. Students from all the years have actively participated in this competition .The topic of the debate was “**All Vehicles must be automated**”. Participated students very well presented their views on the topic. After debating, the students individually had also spoken for 10 min in favour or against of the same topic. The participants were judged by panel of faculty members from the department keeping in mind their presentation style, relevancy to the topic, cross judgement views.

The debate Competition Winners Were:

Anirudhh Nair **II YR., ME**
Manish Choudhary **III YR, ME**



TEACHERS DAY CELEBRATION

“A good teacher can inspire hope, ignite imagination and instill love for learning”

HAPPY
Teachers
Day



In the honourable memory of Dr. Sarvepalli Radhakrishnan – the second President of India , an academic philosopher and one of the most well-known diplomat, scholar, President of India and above all a teacher, Department of Mechanical Engineering celebrated Teacher’s day with great fun and enthusiasm. A special programme was conducted by students of third & Final Year on this day. The program began with the dance performance by students followed by talk highlighting the contribution of teachers in a student’s life. A beautiful poem highlighting the importance of a guru (teacher) was recited by Chirag Jha of final year .Mechanical Students also presented their amazing artwork prepared for this special occasion as their token of love for the teachers. Various fun games & entertainment activity were being planned by the students for their teachers in the program. Thereafter, as a token of love and appreciation for them, teachers indulged in fun filled activities that marked the celebration. They sang, danced and played together creating memories to cherish forever. They revealed in the company of their fellow teachers, taking pride in their role as teachers who transform lives and create future

The function came to an end with a motivating speech by head of the department, Dr.Deepak Paliwal. The speech highlighted the relationship of a baby and mother and it was dedicated to teachers who are considered to be the second parents of students. They mould their life with love, affection, dedication and hard work. He also addressed all the teachers with his inspiring words. He thanked all the teachers for their diligence, sincerity and hard work. All the teachers were given tittles and gifts by their loving students of final &third year.

The day came to an end with the scrumptious refreshment hosted by the mechanical engineering students & cake cutting ceremony

Engineers Day Celebration at Institute of Engineers, Local Chapter, Udaipur

Engineers Day on 15th September was well celebrated at Institute of Engineers, Local Chapter, Udaipur. Smart City Head of J.K.Laxmi Cement & other experienced professionals from industry also attended the program. Various junior engineers from the industry & students from different colleges attended the program. A motivational & guiding speech was delivered by the trained experts & professionals of Institute of Engineers to the present audience. GITS students were awarded & also certificate was distributed to them. Their project guide Dr. Shantanu Bhattacharya from IIT Kanpur, Mechanical Department was also awarded cheque of Rs, 50,000. Experts from J.K. Laxmi Cement also guided the students regarding latest technologies & robotics and other updated areas in the field of technology.



GOLD AWARD to GITS in Quality Circle Forum of India

The 18th Chapter Convention of Quality Circle Forum of India was held on Engineers' day i.e. 15th Sep 2019. In the convention total 60 teams, including 350 participants, took part and presented case studies in the area of QC, Kaizen, Six Sigma, and QIP. Participants were the representatives of various organisations like JK Tyre & Industries Ltd, Laxmi Cement, NTPC, Secure Meters Ltd, and Rashtriya Chemical Fertiliser Ltd etc. The theme of the event was "Quality Concepts through Cultural Breakthrough".

A team from Mechanical Engineering Department, Geetanjali Institute of Technical Studies, also took part in the event and presented a case study on improving the water quality of Udaipur lakes and discussed about the innovative project "Lake cleaning Machine" developed by them.

All case studies were thoroughly viewed by Judges who were from renowned Industries.

As per the format of program, Gold, Silver and Bronze award were to be given to teams on the basis of Judges scores and evaluation.

The results were announced in valedictory session and GITS received Gold Award from the guest of the honor.



Vishwakarma Jayanti celebration at Geetanjali Institute of Technical Studies



Mechanical Engineering Department of Geetanjali Institute of Technical Studies celebrated Vishwakarma Jayanti on 17th September 2019. 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. Lord 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.

Occasion was attended by Director GITS, Prof Vikas Misra, Finance Controller, Shri. B L Jangir, Dean Academics, Prof. P C Bapna, Dean Student Affairs, Prof. Rajeev Mathur, Dean Testing and Consultancy, Prof. Manish Verma, Head Computer Science Engineering, Prof. Amit Sinhal, Head MCA, Prof. Hemant Sau, Training and Placement Officer, Shri. Arvind Singh Pemawat, Head Mechanical and Automobile, Prof. Deepak Paliwal along with all staff members and students from various departments.

Deepak Vyas won 2 silver medals in National Camp

Under officer Deepak Vyas of Mechanical Engineering branch has completed his training among selected cadets from various directorates of India in national advance leadership camp organized by 6 states Punjab battalion. Representing Rajasthan Directorate, under officer Deepak Vyas during his training also participated in public speaking, group discussion, cultural event etc. Director Gits mentioned that Deepak has also been selected for ALC camp in basic leadership camp held at Kota for his excellent presentation. Lieutenant Chintal Patel also stated that Deepak of Rajasthan Directorate 10 states battalion NCC Udaipur, was awarded 2 silver medal for his superb presentation, Playing volleyball, & for Cultural Activity. Head of the department, Dr. Deepak Paliwal & Finance Controller Gits, Mr. B.L. Janghidi congratulated the winner on his grand success.



The student & staff picnic of Gits, Mechanical Department was organized on 21/9/19

Accommodated in two buses, the students & staff (47 student & 6 faculties) made their way to Kumbalgarh, Katar trip early in the morning. Songs, snacks & smiling faces made the journey a befitting beginning to a fun filled day. The picnic party's arrival was anticipated & breakfast was served on arrival. Playing traditional antakshari, making merry & shouting at the top of their voices on the way made the journey pleasant & enjoyable. Amidst of way, at Katar, students & staff enjoyed their crunchy breakfast and shook a leg to popular songs for well over an hour.

After dancing the entire picnic group moved to reach "Kumbalgarh" – picnic destination. The journey to Kumbalgarh was enjoyable one, both due to exquisite scenery on the way and dancing & singing in the bus. They visited the fort and had captured their most memorable moments. The group then turned back towards Katar, to get into the water and had some water activities. Lunch was a welcome diversion. With Dal, baati, rice, Curry, salad, papad, buttermilk, it satisfied everyone's palate. Post lunch, the entire group met again to the common place to indulge in games & dance..Apart from relaxation & enjoyment the picnic also aimed at building team spirit among the group.

The organization of the picnic was done by Mr.Narendra Patel & Dr.Vijayendra Singh Sankhla.

Though the picnic was done in a day, the memories will linger forever.....



One week Green Technology Lab visit of Dr. Deepak Paliwal at University of Malaya, Kuala Lumpur, Malaysia.

Dr. Deepak Paliwal, Head of Department Mechanical Engineering, Geetanjali Institute of Technical Studies, Udaipur, visited renewable energy and green technology laboratory, University of Malaya, Malaysia, during September 23-27, 2019. The University of Malaya is a reputed University and holds 70th Rank worldwide. Dr. Chong Wen Tong, Head *Centre for Energy Sciences in the University* and associated professor, Mechanical Engineering department, invited Dr. Paliwal as visiting faculty to review and discuss various ongoing projects of laboratory. Both had a discussion on a novel ecological air cleaning and cooling system which can be used as a living Green Wall. The objectives of designing this living green wall were to reduce the air temperature by 2°C, increase the relative humidity by 10% , lower the CO₂ level and improve the air quality.

Blade design of the horizontal and vertical axis wind turbines were also reviewed to determine the reliability and efficiency. Since, broad ranges of evolutionary and revolutionary green solutions presently needed in passenger cars which are posing significant environmental challenges due to continue emission of carbon dioxide, nitrogen oxide, and unburned hydrocarbons, a possible alternative of utilizing air power in vehicles was discussed in which the role of wind turbines was considered as a key player.

Overall, this was a wonderful and enriching experience for Dr. Paliwal to visit renewable energy and green technology laboratory, University of Malaya, Kuala Lumpur, Malaysia.



NSSC- Student Ambassador

National Students' Space Challenge (NSSC), a national-level engineering competition for the budding space enthusiasts to showcase their talents in this fest which also happens to be India's largest Space Technology fest. NSSC is organized at IIT Kharagpur each year in association with **Indian Space Research Organization (ISRO)**. The 9th edition of National Students' Space Challenge is being conducted from **1st to 3rd November 2019** is dedicated to research and development in the area of **Space Technology** with the theme of this year's fest being **Black Holes**. During the fest, participants from all across the country compete in the amazing set of space-themed robotic and astronomy based events which challenge their innovative and engineering skills. Participants also get to witness amazing exhibitions, workshops, and guest lectures by eminent personalities across the globe. Space Technology Students' Society (spAts) is the organising team of NSSC. Officially, spats is the student body of **Kalpana Chawla Space Technology Cell (KCSTC)**, the contact point of Indian Space Research Organisation (ISRO), at IIT Kharagpur. The main motto of this fun-packed space themed festival is to raise the standards of space technology and encourage young minds to contribute in the field of astrophysics, cosmology and space technology, the team ensures an extravaganza in the dynamic campus of Indian Institute of Technology, Kharagpur. For the smooth conduction of such activities



Establishment of Institution Innovation council at GITS

Ministry of Human Resource Development, Govt. of India is consistently taking major steps to conduct various innovation and entrepreneurship-related activities in time bound fashion across Indian Academic Institutions. On MHRD's Innovation Cell Foundation Day i.e. 11th September 2019, Geetanjali Institute of Technical studies has also become a part of creating innovative ecosystem in the country and received ***IIC Constitution certificate by Hon'ble Minister of HRD.***

By the establishment of Institution Innovation cell (IIC) at GITS, a better cognitive ability solving environment will be created among students.

The GITS- IIC will be focused on:

- Identifying and rewarding innovations and sharing of success stories.
- Organizing periodic workshops/ seminars/ interactions with entrepreneurs, investors, professionals to create a mentor pool for student innovators.
- To highlight innovative projects carried out by institution's faculty and students.
- Organizing idea competition, mini-challenges etc. with the involvement of industries.



Departmental IIC Presentation

After declaration of internal screening result on 28 th September 2019, among various IIC ideologies of the students , the selected students had given their idea proposal presentation During presentation ,the executive members of the IIC from the department looked upon project concept , technical design considerations, applications ,benefits to the society, economic considerations etc.

The selected students for presentation were:

S.No	Name of student	Year	Concept
1	Rajat Kumar	I(ME)	Self Rechargable Car
2	Divyesh Lohar	I(ME)	Sensor Added Multifunctioning Robot
3	Sanjay Mehta	III (ME)	Dihadi Majdoor Digititaization
4	Kamal Pal Singh Jhala		
5.	Piyush Shrimali		

During the presentation , Head of the Department ,Dr.Deepak Paliwal & IIC Executive members were present.



Final Year ME Students visit to Ahemdabad

Final Year Mechanical Engineering students visited ISRO, Ahmadabad on 14th of October 2019 along with the various other students from Electronics , Electrical Computer Science & Mechanical Branch. The students their learnt about different Launching Vehicles & Satellites. They also learnt about different types of fules used in launching Vehicles. They learnt about GSLV MK-III, that there are three stages of fuels used in launching of Chandrayan. Different fuel injection techniques at different stages were also learnt by the students.They learn about upcoming projects like Gaganyaan & Aditya Project. The students come across various applications used in satellites.



“SPSU Speech Competition -2019”

Sir Padampat Singhania University, Udaipur is a student –centric University and encourages students to develop their interpersonal skills through various extra & co-curricular activities. With the motto of developing the social and moral responsibility towards the society the university has organized a speech competition on 21st October,2019 in the university campus.

The topic for competition is “Responsible Citizen”. The medium of presentation was English. Students, Ujjawal Jaiswal & Chirag Jha from final Year Mechanical participated in the competition. They were given a time of 4 minutes to speak on the topic.



Workshop on Disaster Management

A one day workshop on 15 October 2019 has been organised by the Institute of Engineering India. Students from II year Mechanical Engineering department participated in the workshop. This workshop was organized with aim to increase awareness among public, families. Youth & fresh engineers to overcome & prevent disaster. Chief guest in the workshop was Mr. Qummer Choudhary, who expressed while addressing his speech regarding present conditions of Disasters in India & also suggested various requirements to prevent disasters here in India. He also explained various government schemes & their advantages and shared valuable information regarding using the same. After his speech, another chief guest Er, Purshottam Paliwal (Rtd. Executive Engineer, AVNL, Udaipur) also addressed the workshop participants .He mentioned that some wise before-hand activities can be done to mitigate disaster as post disaster situations cant be controlled.



Interactive session for the PMSSS beneficiaries

To ensure welfare and development of Pradhan Mantri Special Scholarship Scheme (PMSSS) beneficiaries, North western region of AICTE conducted an interactive session at Geetanjali Institute of Technical Studies on 8th November 2019. Prof. Ajeet Angral, consultant AICTE and Prof. Anand Sharma, deputy director PMSSS AICTE were the speakers of session. Information on various opportunities for students undergoing engineering, medical, nursing, humanities, language and other degree courses in colleges across the country through PMSSS was conveyed to 150 students and faculty members who have participated in the session. Prof. Anand Sharma delivered a motivational talk on how Jammu, Kashmir and Ladakh students can strengthen themselves through government schemes. Prof. Anand Sharma took feedback and addressed various issues of participant. GITS Campus Director, Dr. Vikas Misra shared the hard work and contribution of various people from Jammu and Kashmir, to whom he personally met, towards the nation building process. Various students conveyed thanks to AICTE and Geetanjali Institute of Technical Studies for organising such a nice event. Students said that northern most state of India has been endowed with nature's best and all should visit at least once to Jammu, Kashmir and Ladakh. Mrs. Anjali Dhabhai coordinated the entire programme.



Interactive session by GITS-IIC on “Why Start-Ups Fails”

An interactive session on “Why Start-Ups Fails” has been organised by GITS-Incubation centre on 6th November 2019. Key note speaker of interactive session was Shri Umamahesvaram Mandi. He is heading Incubation centre of Indian Institute of Management, Udaipur as CEO. Presently, twenty teams of students are working on innovative business ideas in GITS- Incubation centre. Few more students are in the process of associating with GITS-IIC. During the session, Students have learned about possible mistakes which lead to the failure of start ups by key note speaker. Further, Shi Umamahesvaram discussed about various facilities and upcoming events of IIM, Udaipur incubation centre. GITS Campus Director, Dr. Vikas Misra conveyed that converting innovative ideas into business model is a need of present time. The lifestyle of people is changing with the evolution of technology. Hence, understanding of market and a focused approach play vital role in the journey of transformation of an idea into business. Dr. Deepak Paliwal, heading the incubation centre of Geetanjali Institute of Technical Studies explained the road map of institute’s Incubation centre. He also shared his thoughts on how GITS students can get benefits from a well established nearby incubation centre of IIM, Udaipur. Ms. Surbhi Mishra coordinated the entire programme.



A start up carnival at MNIT Jaipur

A start up carnival has been organized by Rajasthan government on 19 December 19 at MNIT Jaipur. This was a one day programme for students & entrepreneurs who are looking to convert idea into business. This program included various business skills, marketing strategies and a platform to showcase innovative thinking of the participants.

From Department of Mechanical Engineering, following students participated in the carnival:

- Sanjay Mehta
- Naman Shrimali
- Varun Vyas
- Darshan Kr.Deora
- Deepak Soni
- Devkaran Kumawat
- Shubham Panchal



National Workshop on CFD & Structure Analysis Using Ansys

A six days national workshop on CFD and Structure Analysis using Ansys software was organised by department of mechanical engineering from 16th Dec. 2019 to 21st Dec 2019. This workshop was aimed to study mechanical components through finite-element analysis and computational fluid dynamics via various case studies. Many real-world applications and examples were discussed and understood by Mechanical and Automobile Engineering Students and faculty members. Mr. Tarun singh tanwar, external expert from Cadeasy Jaipur defined various engineering problems in Structure and CFD modules of ANSYS in this workshop and developed an approach to solve research problems in FEA domain within the participants.

Dr. Vikas Misra, Director GITS, conveyed to participants that visualization problems based on logic, process, geometries, etc are important for any engineer and understanding on ANSYS tools plays vital role in this. Dr. Deepak Paliwal, Head Mechanical, and Mr. Arvind Pemawat, TPO, GITS expressed thanks to all participants and said that department has planned such interesting workshop in near future as well.



PROUD MOVEMENT FOR FACULTY

Ph.D. AWARDED BY GOVERNOR OF RAJASTHAN SHREE KALRAJ MISHR TO OVER Mr. VIJAYENDRA SINGH SANKHLA ON 13TH CONVOCATION OF MPUAT UDAIPUR



Acadmic Toppers

TOPPERS OF AE II sem (batch 2018-22)

Roll Number	Name	Marks	Position
18EGIAE005	PANSARE NAILESH	SGPA :-8.36	I
18EGIAE003	DIGVIJAY SINGH RAO	SGPA :-7.85	II

TOPPERS OF ME II sem (batch 2018-22)

Roll Number	Name	Marks	Position
18EGIME013	BHUVNESH MEWARA	SGPA :-9.32	I
18EGIAE064	SHIVANSH VAISHNAV	SGPA :-8.69	II
18EGIAE005	AKSHAY SINGH MERTIYA	SGPA :-8.59	II

TOPPERS OF ME IV sem (batch 2017-21)

Roll Number	Name	Marks	Position
17EGIME011	DEEPAK SONI	80.7	I
17EGIME004	ARJUN	79.7	II
17EGIME060	VISHAL SINGH CHOUHAN	76.7	III

TOPPERS OF ME VI sem (batch 2016-20)

Roll No	Name	Marks	Rank
16EGIME004	APOORV GUPTA	73.3	I
16EGIME008	BHUPESH JAIN	71.8	II
16EGIME046	SANJAY KHOKHAWAT	71.5	III

TOPPERS OF AE VI sem (batch 2016-20)

Roll Number	Name	Marks	Position
16EGIAE006	DEEPAK SHARMA	79.1	I
16EGIAE016	MAHIPAL MERTIYA	79	II
16EGIAE022	TARUN KUMAWAT	76.3	III

Placements

3 GITS B.Tech Mechanical students from 2020 Batch placed in Pinnacle Cad (Global Leader in BIM Engineering) for core technical profile.

Congratulations!!!



**B.Tech
MECHANICAL & CIVIL**
STUDENTS PLACED IN



Apoorva Gupta
(Mechanical)

Rohit Gautam
(Mechanical)

Koushelandra Pal Singh Ranawat
(Mechanical)

Shubham Purohit
(Mechanical)

Bhupendra Singh Chouhan
(Civil)

Purushottam Kummawat
(Civil)

Geetanjali Institute of Technical Studies

(Affiliated to RTU, Kota and Approved by AICTE, New Delhi)

COURSES
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