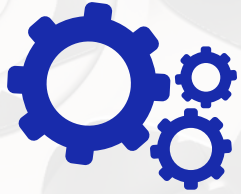




V.V.P.

ENGINEERING COLLEGE

AICTE Approved & Affiliated to GTU, Ahmedabad



MECHANICAL ENGINEERING DEPARTMENT



**July-December
2021**

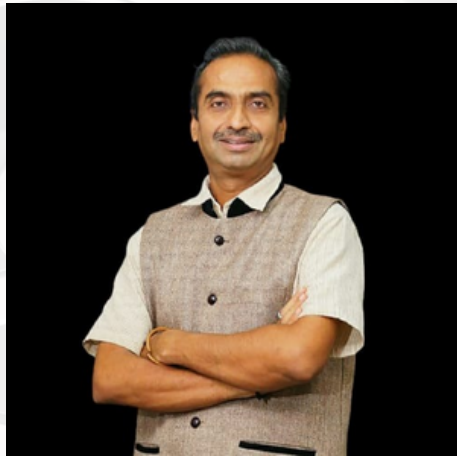
MESSAGE FROM CHAIRMAN, GOVERNING BODY



SHRI LALITBHAI MEHTA

- India's energy transition is in its interest because, otherwise economic growth would not be sustainable and human security would be at stake, since millions of climate refugees are created due to the devastating consequences of climate change.
- The Prime Minister has committed to increasing renewable energy and reaching the 500 GW target by 2030, which is only 100 GW in 2021.
- Our wind energy production is only 12.5 % of the total potential and solar energy production is only 4.6 % of the total potential, a challenging task to tap unused resources.
- The Prime Minister has announced the launch of the National Hydrogen Energy mission.
- Green Hydrogen is a major component of the renewable capacity of energy.
- Engineering problems of cost, scale, adopting new technologies, working out distribution chains, and storage of Hydrogen should be met by the government, bureaucracy, universities, engineers, and technocrats by a coordinated policy and its implementation.

MESSAGE FROM PRINCIPAL



DR. JAYESH DESHKAR

- Welcome to V.V.P. Engineering College, a world-class center for excellence in technical education. We are a leading technological institute of India, home to a wide range of academic departments, providing the best education in the major areas of technology and services in the area of research and consultancy.
- We are proud and distinct through our global technical perspective, cosmopolitan character, and being deeply rooted in the high Indian traditional culture, heritage, and values.
- You would enjoy the challenges and opportunities we offer. We look forwards to welcoming the engineering aspirants to a place of genuine intellectual excellence for an unforgettable simulating experience in the world of existing and emerging technologies, Welcome back to Future....

V.V.P ENGINEERING COLLEGE

VISION

- To be an exemplary institute, transforming students into competent professionals with human values.

MISSION

- To provide a conducive academic environment for strengthening the technical capabilities of the students.
- To strengthen linkages with industries, alumni, and professional bodies.
- To organize various co-curricular and extra-curricular activities for the overall development of the students.
- To practice good governance and conduct value-based activities for making students responsible citizens.



MESSAGE FROM HEAD OF THE DEPARTMENT



DR. NIRAV MANIAR

- Established in 1996 Mechanical Engineering Department is the oldest branch in VVP Engineering College. It is also one of the biggest departments of the institute with a student strength of about 480. While managing this strength, the department is committed to the well-being and all-around development of its students. The objective of the undergraduate program is to prepare the manpower that is globally best. Most of the students, who graduate from the department, end up taking leading positions in industry, academia, and government in both India and abroad.
- The department has a faculty strength of 17 of which 5 faculties hold a doctorate and 3 faculties are pursuing their doctorate from reputed universities. Needless to say, every faculty hold a master's degree. Department has a technical staff of 10 who are associated with 31 exclusive laboratories like fluid mechanics and fluid power, dynamics of machinery, material science, thermal, refrigeration and air-conditioning CIM, and many more. Department also houses an institute central facility on Robotics, 3D printing, and CNC Mill Trainer.

- The department is very well equipped with computational facilities and resources both in terms of hardware and software. Department has more than 100 computing systems and workstations loaded with a wide range of software products covering all areas of mechanical engineering. A special energy audit cell is established by the department wherein faculties and technical staff provide auditing services across the spread of industries.
- The department has evolved to keep up with the ever-increasing challenges in technology development while maintaining a strong base in the fundamental aspects of Mechanical Engineering. While much of today's research in Mechanical Engineering is interdisciplinary requiring knowledge from numerous other science and engineering disciplines, the expertise of the faculty members of the department is categorized into three broad streams i.e. Thermal and fluids engineering, Design engineering, and Manufacturing/production technology.
- The Mechanical Engineering Department of VVP Engineering College is committed to extracting the underlying talent of future aspirants and believes in transforming students into professionally competent and socially sensitive Mechanical Engineers with human values.

MECHANICAL ENGINEERING DEPARTMENT

VISION

- To transform students into professionally competent and socially sensitive Mechanical Engineers with human values.

MISSION

- To provide an excellent academic environment to impart professional expertise to students.
- To organize curricular, co-curricular, and extracurricular activities for students in collaboration with industry, alumni, and professional bodies.
- To nurture and maintain a conducive environment for ethics-based practice and imbibe human values.

PROGRAM EDUCATIONAL OBJECTIVES

Mechanical Engineering graduates will be able to :

- Apply mechanical engineering concepts to work in professional fields.
- Acquire leadership position in different organization
- Provide sustainable solutions in a multidisciplinary environment.

PROGRAM SPECIFIC OUTCOMES

Mechanical Engineering graduates will be able to :

- Apply mechanical engineering knowledge to analyze & solve the problems related to mechanical design, manufacturing & thermal engineering.
- Utilize technical & managerial skills in a multidisciplinary environment to meet the needs of stakeholders.

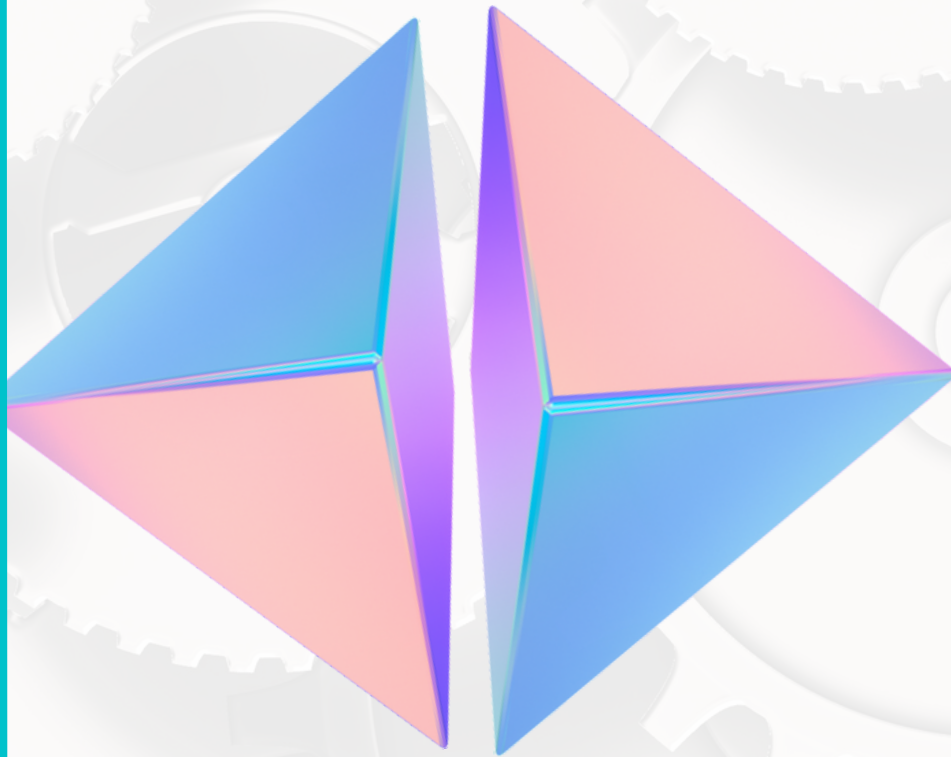
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|---------|-------------------------|----------|
| 1 | GLIMPSE OF PLACEMENT | 8 |
| 2 | RESULTS | 11 |
| 3 | DEPARTMENTAL ACTIVITIES | 17 |
| 4 | ACHIEVEMENTS | 44 |
| 5 | CREATIONS OF STUDENTS | 46 |
| 6. | WORDS OF ALUMNI | 49 |

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**OSKAR
INDUSTRIES**

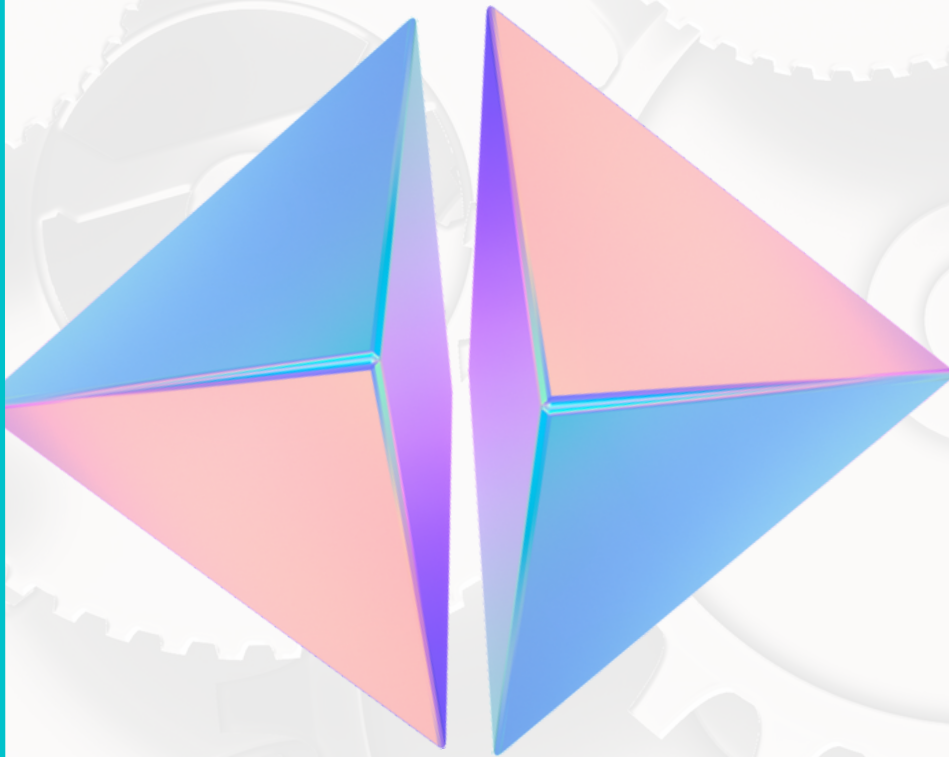
CONGRATULATIONS



**JAYMEET
GOJIYA**



**RAVI BRASS
INDUSTRIES**



**2ND SEM TOPPERS IN GTU EXAM AT
DEPARTMENT LEVEL**



**KUSH
DESAI**

9.40/10 SPI



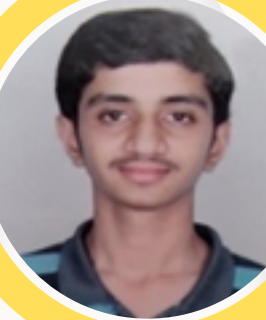
**DEVEN
KACHROL**

9.35/10 SPI



**DISHANT
FALDU**

9.30/10 SPI



**PARTH
RANPARA**

8.90/10 SPI



**ANGAD
DEEPSINGH**

8.90/10 SPI



**VIVEK
RATHOD**

8.80/10 SPI

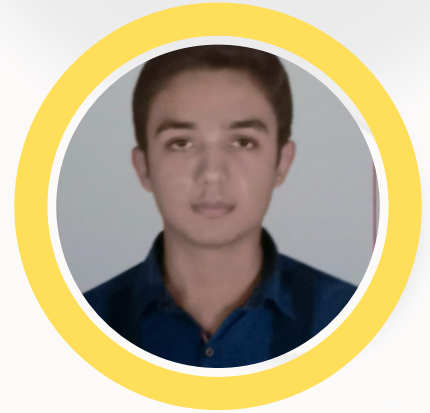
**4TH SEM TOPPERS IN GTU EXAM AT
DEPARTMENT LEVEL**



**KHERADIYA
HARSH
10/10 SPI**



**UNAGAR
SAGAR
10/10 SPI**



**TILALA
OM
9.61/10 SPI**



**ZINZUVADIYA
KALPESH
9.48/10 SPI**



**MALAVIYA
DHRUVIL
9.39/10 SPI**



**VORA
JAYMEEN
9.39/10 SPI**

6TH SEM TOPPERS IN GTU EXAM AT
DEPARTMENT LEVEL



**SAKHARELIYA
RAJNISH
10/10 SPI**



**JANI
AKSHAT
9.67/10 SPI**



**FATANIYA
BHAUTIK
9.62/10 SPI**



**GHORECHA
MEET
9.52/10 SPI**



**GADHIYA
JENISH
9.48/10 SPI**



**SAVALIYA
ARJUN
9.48/10 SPI**

8TH SEM TOPPERS IN GTU EXAM AT DEPARTMENT LEVEL

**Total 07 Students have scored
GTU First Rank in all branches as per SPI**



Lathigara Sachin
10/10 SPI



Naik Jeet
10/10 SPI



Malaviya Varun
10/10 SPI



Parmar Yashraj
10/10 SPI



Mehta Malay
10/10 SPI



Mehta Rahul
10/10 SPI



Tank Shivam
10/10 SPI

DETAILS OF HIGHER STUDIES 2017-21 BATCH STUDENTS

| | |
|---|--|
|  |  |
| VARUN MALAVIYA | GAURAV PADARIYA |
| Post Graduated Diploma Course in power technology | Aircraft Maintenance Engineering |
| Jindal Institute of power technology, Chattisgarh,India | Thakur Institute of aviation technology, Mumbai |
|  |  |
| SAVAN PANDYA | MALAY MEHTA |
| M.Tech. | M.E. Mechanical Engineering |
| Vellore Institute of Technology(vit), Tamilnadu | University of Windsor Windsor, Ontario, Canada |



TECHNICAL **EVENTS**



PARIKSHAN- 2021

Concept to Practice



- On the day of 11th September 2021, Mechanical Engineering Department organized the technical event "PARIKSHAN" - 2021 for 3rd, 5th, and 7th-semester students. This event was organized to improve the practical knowledge of students to exhibit their talent with a competitive spirit. Concept to Practice allows participants to acquire the practical knowledge and abilities offered by the mechanical engineering which they wish to form part of, and at the same time to improve their curriculum vitae. While imparting practical knowledge to students, most of the activities involve teamwork where students are required to work in a group or as a team. On one hand, it improves a student's ability to interact with his/her fellow students and encourages them all for teamwork.

- This event was executed with the different domains of mechanical engineering like Manufacturing, Thermal, and Automobile and organized at its best of quality. Department feels proud to organize such a successful event and would like to convey thanks to all staff members, Head of Department Dr. N. P. Maniar, Principal Dr. J. V. Deshkar, and management of VVP Engineering College for their great support, timely advice, and cooperation in organizing successful Fest

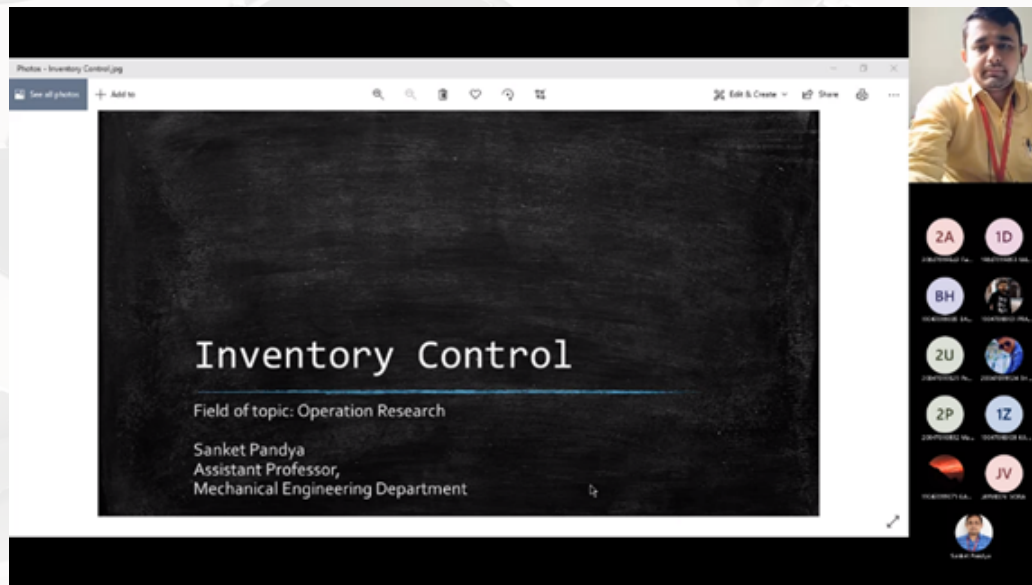


The background features a light gray field with several interlocking gears of various sizes. In the center, two 3D pyramids are positioned side-by-side. The left pyramid has a blue top face and a red bottom face, while the right pyramid has a red top face and a blue bottom face. A large teal triangle is on the left side of the page, pointing towards the center. A dark blue rectangular border frames the central text.

EXPERT LECTURE



EXPERT LECTURE ON "INVENTORY CONTROL IN INDUSTRIES"



By : **Prof. Sanket Pandya**
M.E.(CAD/CAM). B.E.(Production Engg.)

- Expert lecture in association with IEl on "Inventory Control in Industries" was delivered by Prof. Sanket Pandya, Assistant Professor, Mechanical Engineering Department to 6th-semester Mechanical Engineering students on 23-10-2021. It was arranged online to enhance their knowledge in the Operation Research area.
- Students learned about inventory control in industries. Students became aware of the financial aspects of inventory management. Students enhanced their knowledge in the domain of operations research.

EXPERT LECTURE ON " SKILLS TO WRITE A RESEARCH PAPER"



By : **Mr. Nikhil Jha**

(Design Engineer at Oscar Industries)

Coordinator : **Prof. Pooja Ghodasara**

- This session was about how to write a research paper. The expert deliberated his experience of writing and presenting a research paper. It was about how to search papers on websites and how to write a review paper.
- Students got aware of writing technical content in the form of research papers and enhanced their technical vocabulary.

EXPERT LECTURE ON "BASIC OF DESIGN ENGINEERING"



By : **Prof. Parth Sejpal**
CEO, SSIC (SAURASTRA UNIVERSITY)

Coordinator : **Prof. Niraj R. Shingala,**
Prof. Pankit B. Kondhiya
Prof. Parth V. Delvadiya

- A college-level expert lecture on Basics of Design Engineering in association with ISTE was organized on 13/08/2021 and 17/09/2021 for 3rd and 5th-semester students respectively.
- Student got knowledge about the Design Thinking process and also got the idea about team formation and open design school portal related information
- Students learned about the process of design thinking, received knowledge about the selection of domains for product design and development, were motivated to work in teams and take accountability, and got information about the SSIP grant procedure.

EXPERT LECTURE ON "ROLE OF AN ENGINEER"



By : **Mr. Subodh Rav** Coordinator : **Dr. Dipesh Kundaliya**
(Sr. Manager, at Rolex Rolled Rings)

- A department-level expert lecture on the Role of an Engineer was organized on 23/06/2021 for 1st, pre-final and final year students.
- Contents of Invent, Design, Analyze, build and Test of Machines Complex Systems, Structures, Gadgets, and Materials to fulfill functional objectives and requirements. Understand customer expectations, Product Design, Process Design, Quality Control, Test and instructions, On-time delivery, Product Life Cycle, Warranty, Feedback, After Sales Support, Safety • Environment aspects and impact, Statutory regulation fulfillment, Cost-effective solution, Easily acceptable to user, MSDS (Material Safety and Data Sheet), Communication, Life Cycle Assessment. Product Warranty, Risk and Opportunity, Inquiry, Feasibility Study / Assessment, Production Planning and Control, Control Plan, Error Proofing, FMEA / DFMEA, Failure mode effect Analysis, Submission for approval with all necessary documents, Serial Production, etc were covered in this expert session.
- Students learned the importance of new product development and eventually business startups. Also important about the contribution of an engineer towards society.

EXPERT LECTURE ON "I.C. ENGINE AND DIFFERENTIAL" (COMPLETE ASSEMBLY AND DISASSEMBLY)



By : **Mr. Vijay Bhambri**
(Director, at Kritika Technical academy)

Coordinator :
Prof. Pooja Ghodasara,
Prof. Sahil Yagnik, Mr. Kirit Gohel

- Expert lecture on Skill Development was organized on 17/07/2021 for 2nd-semester students.
- A webinar on "IC engine-Two stroke and differential (Complete assembly and disassembly)" was arranged by Mechanical Engineering Department on 17th July 2021, for 2nd-semester students of the Mechanical Engineering Department, V. V. P. Engineering College, Rajkot. This webinar was conducted with a prime objective to give students an insight of the latest technology in IC engines and differential. Speaker for this webinar was Mr. Vijay Bhambri, who is working as director of Kritika Technical Academy, Nagpur. 45 students have participated in this webinar through Microsoft Team online platform.
- Students understood the working of 2 stroke engine and assembly of differential and were able to identify the different critical components of IC engine differential.

EXPERT LECTURE ON " BASIC OF DESIGN ENGINEERING"

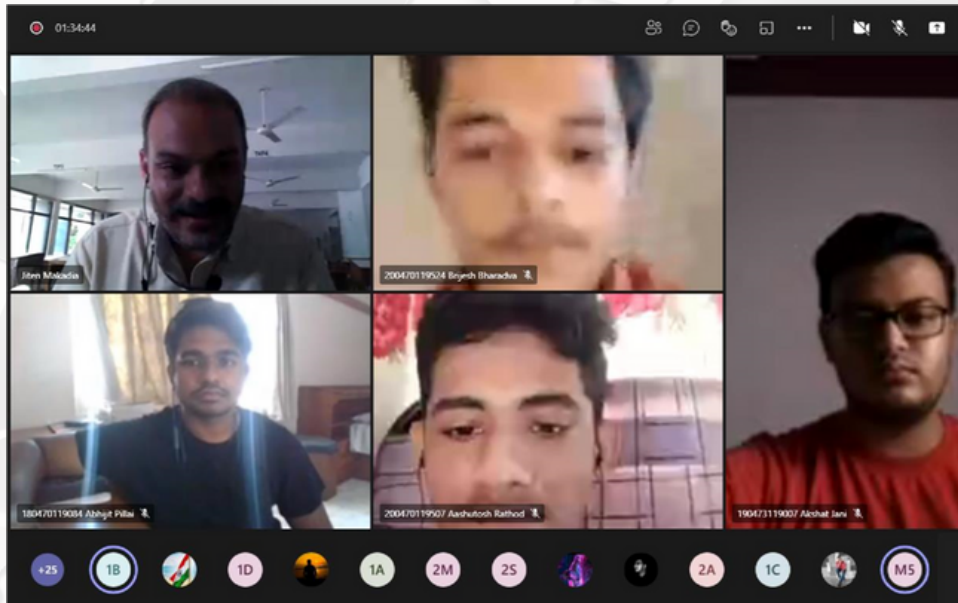


By : **Prof, Pankit B.Kondhiya**
(Assistant Professor)

Coordinator :
Dr. Dipesh D. Kundaliya,
Prof. Anjana D. Saparia

- Expert lecture on basics of design engineering was organized on 17/07/2021 for 2nd-semester students.
- Students got knowledge about the Design Thinking process and got ideas about team formation and open design school portal-related information.
- Students learned about the process of design thinking, got knowledge about the selection of domains for product design and development, and got motivated to work in teams and take accountability.

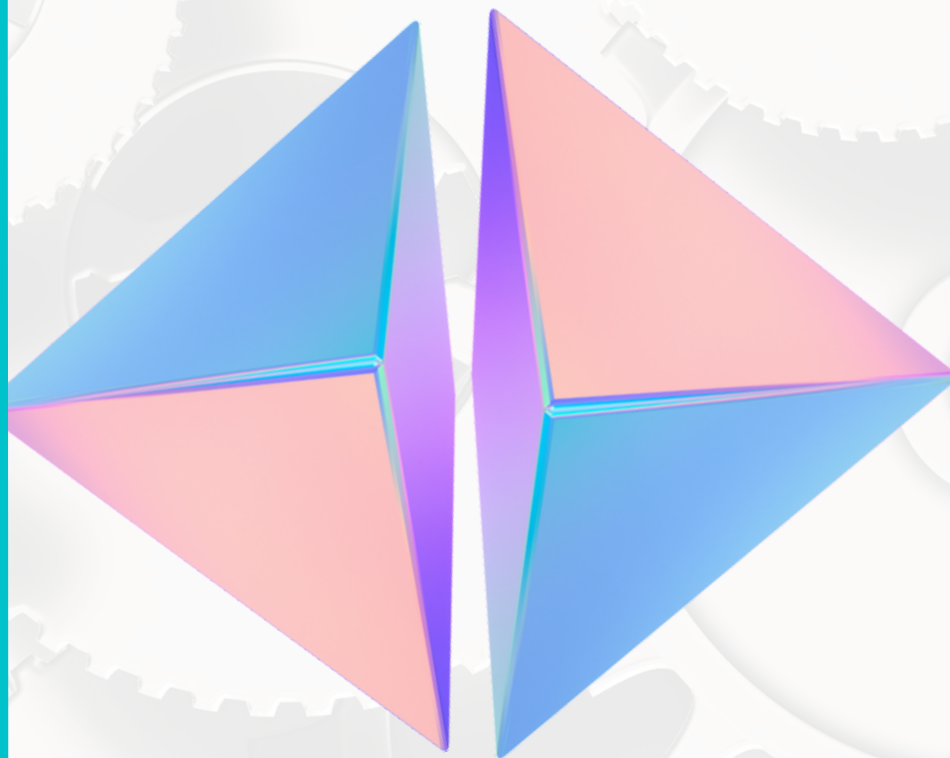
SEMINAR ON "EFFECTIVE RESUME WRITING"



By : **Mr. Mayanik Batavia**
(M.B.A. & B.E.)

Coordinator : **Prof. Jiten Makadia ,
Prof. Vijay Mehta,
Prof. Sanket Pandya**

- College-level Seminar on Effective resuming writing was organized on 17/07/2021 for 5th and 7th-semester students.
- Effective resumes were presented to students. Knowledge on the typical resume was imparted which enables students to write and present their CV based on job requirements.
- Students got equipped with the procedure and techniques of effective resume writing.



INDUSTRIAL Visit



INDUSTRIAL VISIT AT "RAVI METAL TREATMENT PVT. LTD."



- An industrial visit at Ravi Metal Treatment Pvt. Ltd. was organized on 05/10/2021 for 3rd-semester students at the department level.
- Ravi Metal Treatment is a leading provider of heat treatment solutions to Industries in India and abroad. The company owns seven fully equipped and smartly manned facilities in the city of Rajkot, India.
- Lead ably by the founder and proprietor Mr. Ramesh V Rachh, the company has achieved leadership status through the use of the latest technologies and consistent up-gradation of people, processes, and quality services. He has an experience of more than 40 years in the field of Heat treatment, some of them being in the association of Czech and German Heat Treatment experts. Being the undisputed specialists in the field of heat treatment of metals, the founder, and the team prides themselves on having a strong and sustainable client base.

Students got exposure to the practical working environment in industry and demonstration about various heat treatment processes like carburizing, nitriding, and quenching.



INDUSTRIAL VISIT AT "RAJKOT DAIRY"



Coordinator : *Prof. Pankit B. Kondhiya,*
Prof. Parth V. Delvadiya,
Mr. Samir K. Kanaiya,
Mr. Kirit N. Gohel

- Department organized an Industrial visit at Rajkot Dairy on 17/12/2021 for 3rd-semester students.
- Rajkot Milk Union (RMU), Gujarat, India is a member union of the Gujarat Co-operative Milk Marketing Federation (GCMMF) Ltd, better known as AMUL (Anand Milk Union Ltd), With Six Milk Chilling Centers (MCC) / Milk Cooling Units (MCU), 90 Bulk Milk Cooling Units (BMCU) beside one dairy plant at Rajkot of 6.00 LLPD. It is a vibrant organization that serves consumers not only of Rajkot but also rural areas of Rajkot. Apart from other districts of Gujarat, its consumer is spread in other states of India as well that is backed by the products of global standards under the AMUL brand.



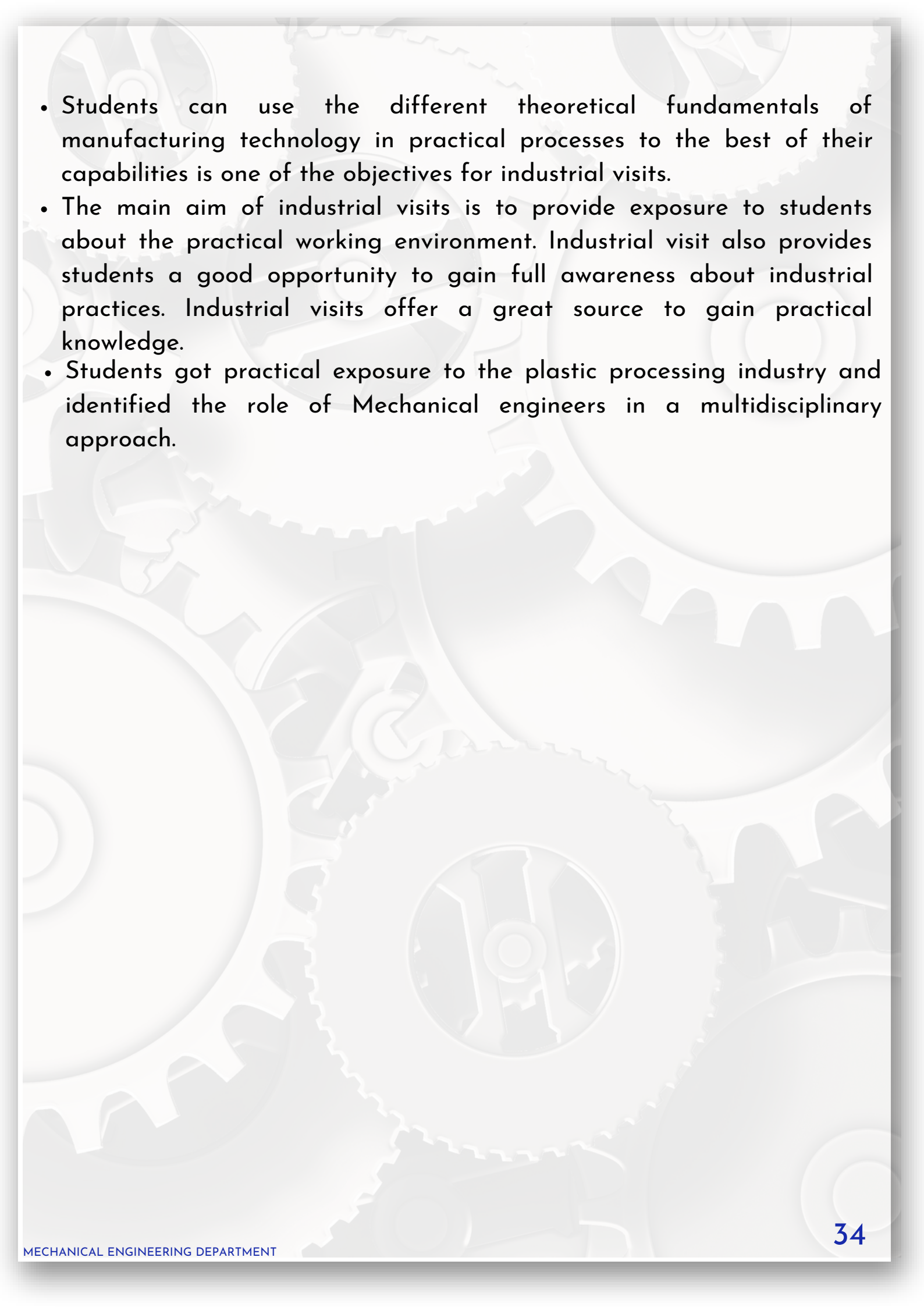
- The organization is widespread and procures milk mainly from 14 Talukas with 834 functional Dairy Cooperative Societies (DCS) including 444 Women DCS and also a few DCSs of four other districts namely, Junagadh, Amreli, Porbander, and Jamnagar. The milk is procured from the small/marginal/landless producers from these Talukas and is sent to their nearest chilling centers. RMU has 6 chilling units at Wankaner, Jamkandorna, Lajai, Vichhia, Kalawad & Majevasdi besides one composite dairy plant at Rajkot. Plans are proposed for the expansion of the existing units and setting up new world-class plants thereby increasing the milk procurement, processing capacity and giving a consistent supply of liquid milk to consumers.
- RMU manufactures products of truly international quality under brand names AMUL and Gopal comprising of milk and various other milk products like Ghee, Butter, Butter Milk, Flavoured Milk, and Peda, It is also planning to add to its product portfolio by extending its infrastructure to manufacture Probiotic Dahi, Probiotic Lassi, Probiotic Butter Milk, Ice Cream and Paneer.
- Students got knowledge about various equipment used in the dairy industry, identified the role of Mechanical engineers in a multidisciplinary approach, and understood the importance of teamwork.

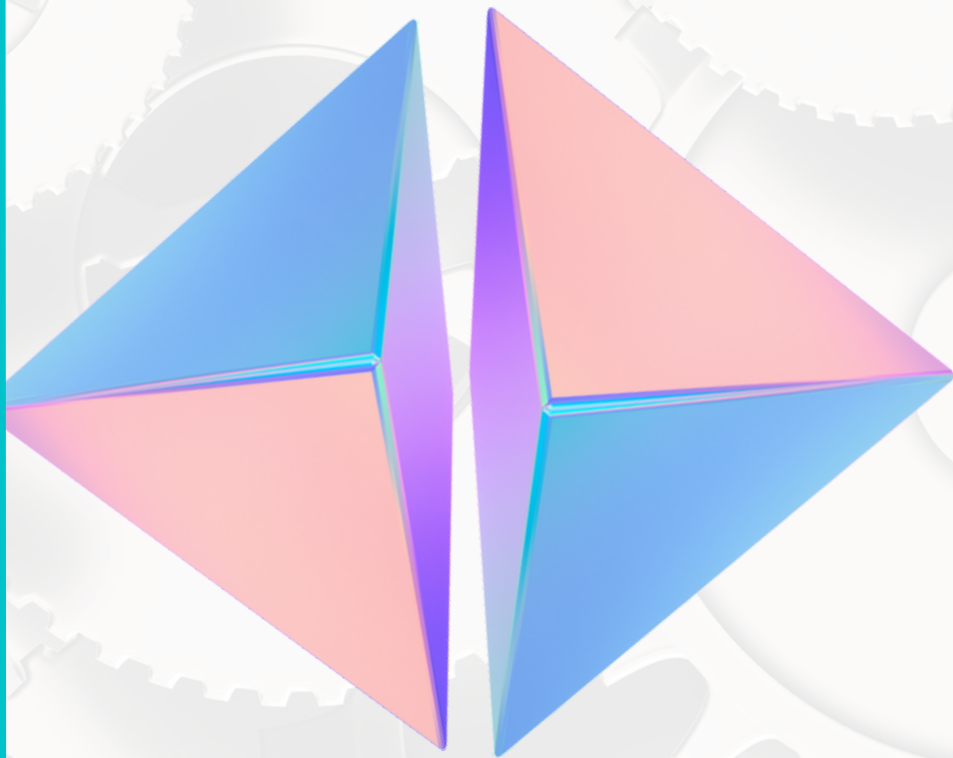
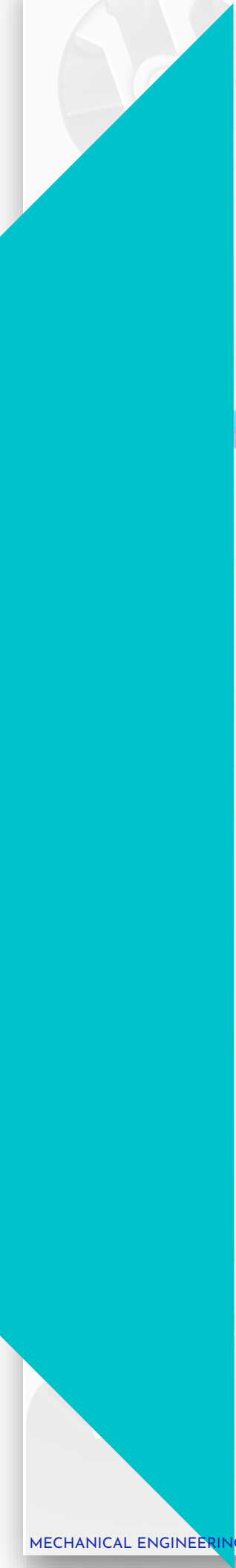
INDUSTRIAL VISIT AT "ACTION WARE INDIA PVT. LTD."



Coordinator : *Prof. Pankit B. Kondhiya,*
Mr. Ramesh D. Ravat

- Department had organized an Industrial visit at Action ware India Pvt. Ltd. on 18/09/2021 for 5th-semester students.
- Action ware India Pvt. Ltd. is one of India's biggest multi-disciplinary business establishments with its headquarters in Rajkot, Gujarat. Since its inception in 1998, the vision behind this giant endeavor is always full Customer Satisfaction by delivering Quality products with utmost Reliability.
- The range of Action ware products is superior in quality and highly durable. They are designed to be both functional and eye-catching. The range includes - KITCHENWARE, HOUSEWARE, and CLEANING PRODUCTS, which are manufactured in our complete, automatic plant using premium materials and cutting-edge technology.

- 
- Students can use the different theoretical fundamentals of manufacturing technology in practical processes to the best of their capabilities is one of the objectives for industrial visits.
 - The main aim of industrial visits is to provide exposure to students about the practical working environment. Industrial visit also provides students a good opportunity to gain full awareness about industrial practices. Industrial visits offer a great source to gain practical knowledge.
 - Students got practical exposure to the plastic processing industry and identified the role of Mechanical engineers in a multidisciplinary approach.



WORKSHOP ON "DISMANTLING AND ASSEMBLING OF IC ENGINES"



By : *Prof. Jiten Makadia,*
(Assistant Professor)



- A workshop was conducted on Dismantling and assembling of IC engines by Prof. Jiten Makadia on 05/08/21 for 3rd-semester students.
- Students were given an assembled actual IC engine. Within a time duration of 2 hours, students were supposed to dismantle the entire engine and assemble the same. Furthermore, they were instructed to identify the engine parts. The entire division was divided into groups of 8 students each and a total of 4 groups. Each group was given the toolkit and an assembled IC engine to perform the activity.
- Students understood the assembly of components of IC engine, identified critical parts of IC engine which are only visible after dismantling the engine, and were motivated to select a project based on IC engine.

WORKSHOP ON "INDUSTRIAL INTERNET OF THINGS"

Coordinator : *Dr. Dipesh Kundaliya*

By : *Prof. Ravin Sardhara* ,

(Assistant Professor)

Dr. Dipesh Kundaliya

(Assistant Professor)



- A workshop was conducted on IIoT by Dr. Dipesh Kundaliya on 16/09/21 for 5th and 7th semester students.
- IIoT is an important part of what is described as the Fourth Industrial Revolution or Industry 4.0. IIoT provides the opportunity to utilize the power of smart machines and real-time analysis to take advantage of the data that machines have produced in industrial settings for years.
- To in line with above requirement Dipesh Kundaliya sir has presented different terminology related with IIoT and Industry 4.0 and Prof. Ravin sir has explained Arduino, Arduino programming with a simple, effective language with addition of practical experiment.
- Students learned about the use of Arduino for IIOT purposes and got knowledge about multidisciplinary projects in Mechanical Engineering

The background features a light gray field with several interlocking gears of various sizes. Two large, colorful triangles, one blue and one red, are positioned in the upper center, overlapping each other. A large teal triangle is on the left side of the page.

CONTENT BEYOND SYLLABUS



CONTENT BEYOND SYLLABUS ON "CALCULATION OF COST AND REQUIRED COMPONENTS FOR THE HOME ROOF TOP PV SOLAR"



**V. V. P. ENGINEERING COLLEGE
MECHANICAL ENGINEERING
DEPARTMENT**

**Expert Lecture
on
Calculation of cost and required
components for the Home Rooftop
PV Solar**

Prof. Vijay V Mehta
M.Tech. (Nuclear Engg.)

Semester: 7th
25th Oct, 2021 || 10.00 am to 10.55 AM


Solar roof top Installation are very beneficial for household power requirement. Owing to fossil fuel depletion and pollution issues, there is need to shift towards renewable energy source. This lecture gives useful Insights about the tentative cost of installation and the required infrastructure of solar roof top panel

ONLINE SESSION THROUGH: **Microsoft Teams**

- Prof. Vijay Mehta conducted an expert lecture on "Calculation of cost and required components for the home roof top PV Solar" on 25th October 2021 for 7th semester students.
- Owing to continuous development in research and technology, it becomes evident to facilitate students with recent trends running in industries and the latest technology in the respective domain.

- To fulfill this gap, engineering institutions must impart content beyond the syllabus mentioned in the university curriculum. Henceforth an expert session on the above-mentioned topic was conducted through which students got more insights into the said domain.


CONTENT BEYOND SYLLABUS LECTURE ON "MAGNETIC REFRIGERATION"



V. V. P. ENGINEERING COLLEGE
MECHANICAL ENGINEERING
DEPARTMENT

Lecture
on

MAGNETIC REFRIGERATION



Dr. Jiten Makadia
Ph.D., M.E. (Thermal Engg.)

Semester: 7th
25th Oct, 2021 || 7:45 am

Magnetic Refrigeration is a promising technique to produce required cooling effect. The system is highly efficient as compared to conventional VCRS and VARS as it does not involve compression. Currently research is underway in this technique of refrigeration.

ONLINE SESSION THROUGH: **Microsoft Teams**

- Dr. Jiten Makadia conducted an expert session on "Magnetic Refrigeration" for 7th semester students on 25th October 2021.
- The magnetocaloric effect (MCE, from magnet and calorie) is a magneto-thermodynamic phenomenon in which a temperature change of a suitable material is caused by exposing the material to a changing magnetic field.

- This is also known by low-temperature physicists as adiabatic demagnetization. In that part of the refrigeration process, a decrease in the strength of an externally applied magnetic field allows the magnetic domains of a magnetocaloric material to become disoriented from the magnetic field by the agitating action of the thermal energy (phonons) present in the material. If the material is isolated so that no energy is allowed to (re)migrate into the material during this time, (i.e., an adiabatic process) the temperature drops as the domains absorb the thermal energy to perform their reorientation. The randomization of the domains occurs in a similar fashion to the randomization at the curie temperature of a ferromagnetic material, except that magnetic dipoles overcome a decreasing external magnetic field while energy remains constant, instead of magnetic domains being disrupted from internal ferromagnetism as energy is added.
- Students understood the construction and working of Magnetic Refrigerator and got motivated to select projects and conduct research-based activity in HVAC systems.

CONTENT BEYOND SYLLABUS LECTURE ON "THERMOACOUSTIC REFRIGERATION"



V. V. P. ENGINEERING COLLEGE
MECHANICAL ENGINEERING
DEPARTMENT

Lecture
on

THERMOACOUSTIC REFRIGERATION

Prof. Pooja Ghodasara

M.Tech (Energy systems)

Semester: 7th

25th Oct, 2021 || 8:45 am



Thermoacoustic refrigeration is a promising technique to produce required cooling effect. The system is highly efficient as compared to conventional VCRS and VARS as it does not involve mechanical compression. Henceforth this technique is a promising way of creating cooling effect with minimum entropy generation rates.

ONLINE SESSION THROUGH: **Microsoft Teams**

- Prof. Pooja Ghodasara conducted an expert lecture on "Thermoacoustic Refrigeration" on 25th October 2021 for 7th semester students.
- It is necessary for engineering institutions to impart content based on university curriculum.
- However, owing to never ceasing research and advancement in technological arena, it becomes imperative to facilitate students with latest knowledge in respective domains.
- Henceforth an expert session on above mentioned topic was conducted through which students got more insights in the said domain.
- Thermoacoustic refrigeration systems operate by using sound waves and a non-flammable mixture of inert gas (helium, argon, air) or a mixture of gases in a resonator to produce cooling. Thermoacoustic devices are typically characterized as either 'standing-wave' or 'traveling wave'.
- Students understood the application of sound energy in Refrigeration systems and got motivated to conduct research-based activity.

CONTENT BEYOND SYLLABUS LECTURE ON "HEAT TRANSFER AUGMENTATION TECHNIQUES "



V. V. P. ENGINEERING COLLEGE
MECHANICAL ENGINEERING
DEPARTMENT

Lecture
on
**HEAT TRANSFER AUGMENTATION
TECHNIQUES**

Prof. Pooja Ghodasara
M.Tech (Energy systems)

Semester: 5th
25th Oct, 2021 || 7:45 am

Enhancement in heat transfer rates has always been an area of interest for researchers and industries. Heat being a form of energy always need to be conserved or optimally used. This lecture deals with augmentation in heat transfer rate for thermal energy systems

ONLINE SESSION THROUGH: **Microsoft Teams**

- Lecture of content beyond syllabus on topic Heat Transfer Augmentation was held on 25/10/2021 by Prof. Pooja Ghodasara for students of 5th semester.

- Heat transfer augmentation techniques are commonly used in areas such as process industries, heating, and cooling in evaporators, thermal power plants, air-conditioning equipment, refrigerators, radiators for space vehicles, automobiles, etc.

- Heat transfer enhancement techniques generally reduce the thermal resistance either by increasing the effective heat transfer surface area or by generating turbulence. Sometimes these changes are accompanied by an increase in the required pumping power which results in higher costs.
- Students understood the techniques about heat transfer augmentation in thermal systems, were able to correlate the modes of heat transfer for heat exchange systems and the concept of using nanofluids for heat transfer augmentation.



CULTURAL EVENTS



YOUTH FESTIVAL "NAVRANG LITERATURE"



By: *Prof. Pooja Ghodasara*

- "NAVRANG" youth festival is an event wherein students get the opportunity to present their communications and literacy skills through events like quizzes, Elocution, Debate, Essay writing, Scriptwriting, and story writing. This a college-level event which was organized on 4/9/21



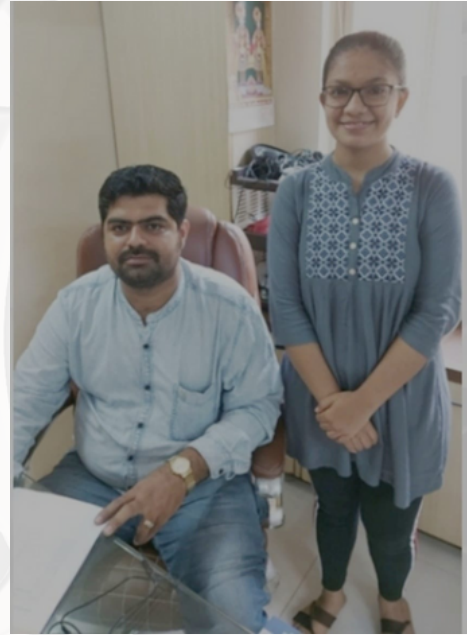
RESEARCH PAPER WRITING COMPETITION



Coordinator : *Prof. Pooja Ghodasara ,
Prof. Jasmin Bhimani*

- Research Paper writing competition is organized by VVP Engineering college to motivate students in the area of research and enhance their technical writing skills. This event was organized on 24/08/21.
- Engineering institutions must impart content based on the university curriculum. However, owing to never-ceasing research and advancement in the technological arena, it becomes necessary to facilitate students with the latest knowledge in respective domains. Henceforth a research paper writing competition was organized for the students to enhance their writing skill.

BACK TO SCHOOL DAY - KRITAGNATA DIVAS



- We firmly believe that the success of an individual lies in the value and morale which is imparted by the school.
- Therefore, to keep the value alive in the community we and our students celebrate "Back to School Day" in the month of August. As a part of this wonderful initiative, our students visited schools for a formal thanksgiving to the valued teachers from where they have learned lessons of life.
- Students from 3rd, 5th & 7th semesters have visited their schools on 21st August 2021 and spent happy hours with their teachers. All the students relived their school life and truly enjoyed the visit.



ACHIEVEMENTS



STAFF ACHIEVEMENT AND AWARDS

1. Dr. Dipesh Kundalia was designated as a Member of the board of studies at Darshan University.
2. Prof. Niraj Shingala awarded :
 - "Reviewer Certificate" for an active Review member of IJCRT journal.
 - Membership Certificate of JETIR

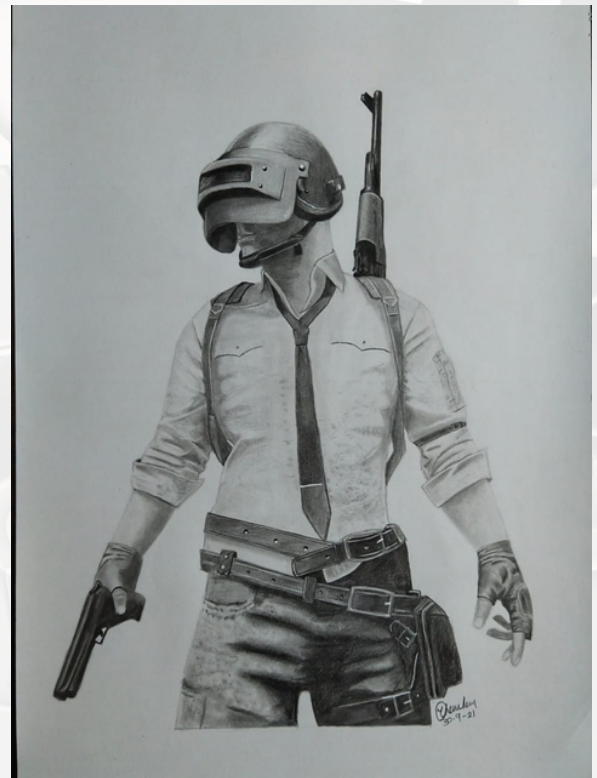
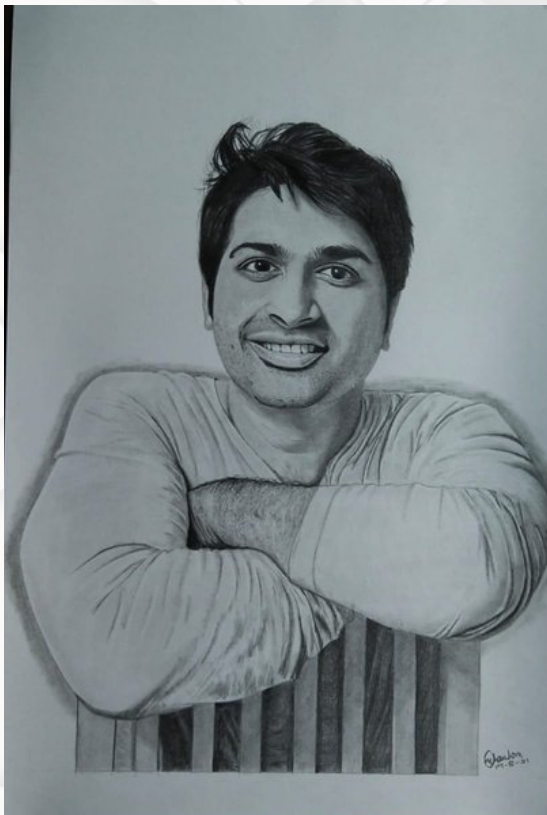


CREATION OF STUDENT



By:

SHIVAM JOSHI (SEM-3)



By:

YASHRAJ CHAUHAN (SEM-3)

CREATION OF STUDENT



By:
KRUPA BUDDHBHATTI
(SEM-3)





**WORDS OF
ALUMNI**



From :-

Rutvik Aniruddh Joshi,
Shivalay. Vasundha Society,
Behind govt. Press Colony,
Jamnagar Road, Rajkot - 6

Date:- 27.11.2021.

To,
Shri Lalitbhai Mehta,
Hon'ble Trusty shri,
VVP Engineering College,
Rajkot.

Respected sir,

With proud, I would like to inform that I was a student of Mechanical Engineering of VVP Engineering College during the year 2014 to 2018 and obtained Bachelor degree with CGPA 8.32

Then I decided to go abroad for further studies. Accordingly, I started preparation and got admission in UNIVERSITY OF WINDSOR, ONTARIO, CANADA and commenced further study to get Master degree. With the grace of almighty God, my parents, hard work in study and discipline in life, myself stood CLASS FIRST in LEAN MANUFACTURING competing students of various countries around the globe. I obtained Master degree of Mechanical Engineering from the University in August 2020 successfully with overall 89%.

At present I am working as a PROJECT ENGINEER in DAVID BROWN SANTASALO in CANADA.

With folded hands, I would like to express that the culture based teaching provided by the college is very useful in the further life of the students when they enter in the corporate world or starts their own business after completion of college. Management also insists on implementing the culture based education to the students and as a result students achieve both discipline and education very well, which is very essential for shaping the future of the students and also keeps the students attached to the society and the country.

I will be always thankful to my Professors, Principal of VVP ENGINEERING COLLEGE and Management of the college for giving perfect education, extra ordinary workshop training and disciplined college atmosphere which helped me to obtain great success in my career.

Yours sincerely,

Sd/-

Rutvik Aniruddhbhai Joshi,
Student of BE (Mechanical),
Batch - 2014 to 2018,
VVP Engineering College, Rajkot.

પ્રતિજ્ઞા

અમે,
વી.વી.પી.

એન્જનીયરીંગ કોલેજના
વિદ્યાર્થીઓ, સંકલ્પ કરીએ છીએ કે,
અમે શ્રદ્ધા, સંયમ, શિસ્ત,
એકાગ્રતા અને પુરુષાર્થથી, જ્ઞાન પ્રાપ્ત કરી,
સ્વનાત્મક અને હકારાત્મક અભિગમ કેળવી,
સામર્થ્યવાન ઇજનેર બની,
વિશ્વના મંગલ વિકાસ માટે,
ભારતમાતાને, પ્રથમકક્ષાની,
મહાસત્તા બનાવવા,
અવિરત
પુરુષાર્થ
કરતા રહીશું.

**ભારત
માતા કી
જય**

राष्ट्राय स्वाहा इवं न मम ।



V.V.P. ENGINEERING COLLEGE

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