V. V. P.
ENGINEERING COLLEGE
AICTE Approved & Affiliated to GTU, Ahmedabad

MECHANICAL ENGINEERING DEPARTMENT

July-December
2020

MESSAGE FROM CHIRMAN, 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 PRINCIPALI

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, a home to a wide range of academic departments, providing 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 technical capabilities of the students.
- To strengthen linkages with industries, alumni and professional bodies.
- To organize various co-curricular and extra-curricular activities for 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. JIGNASA MEHTA

- 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 student strength of about 480. While managing this strength, department is committed to wellbeing and all round development of its students. Objective of the undergraduate programme 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 faculty strength of 20 in which 6 faculties holds doctorate degree and 4 faculties are pursuing their doctorate from reputed universities. Needless to say every faculty hold masters degree. Department has a technical staff of 11 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 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 over time 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 of interdisciplinary nature 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.

- Mechanical Engineering Department of VVP Engineering College is committed to extract the underlying talent of future aspirants and believe in transforming students into professionally competent and socially sensitive Mechanical Engineers with human values.

MECHANICAL ENGINEERING DEPERTMENT

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 in students.
- To organize curricular, co-curricular and extracurricular activities for students in collaboration with industry, alumni and professional bodies.
- To nurture and maintain conducive environment for ethics-based practice and imbibement of human values.

PROGRAM EDUCATIONAL OBJECTIVES

Mechanical Engineering graduates will be able to :

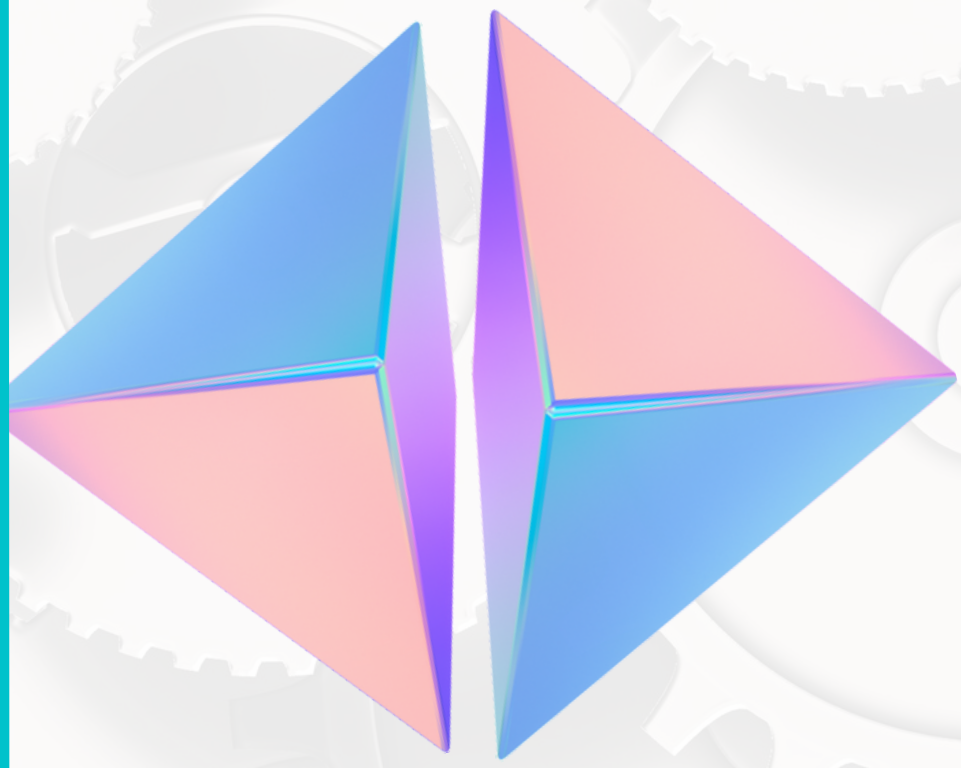
- Apply mechanical engineering concepts to work in professional fields.
- Acquire leadership position in different organization
- Provide sustainable solutions in multidisciplinary environment.

PROGRAM SPECIFIC OUTCOMES

Mechanical Engineering graduates will be able to :

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

EDITORIAL BOARD




PLACEMENT

GLIMPSES OF PLACEMENT

CONGRATULATIONS

GANDHI MEET

Reliance Industries Limited

RELIANCE INDUSTRIES

CONGRATULATIONS

VIREN VAGHELA

IRM Energy

IRM ENERGY PVT. LTD.

CONGRATULATIONS

NIRAV PAUN

OMNITECH

OMNITECH ENGINEERING

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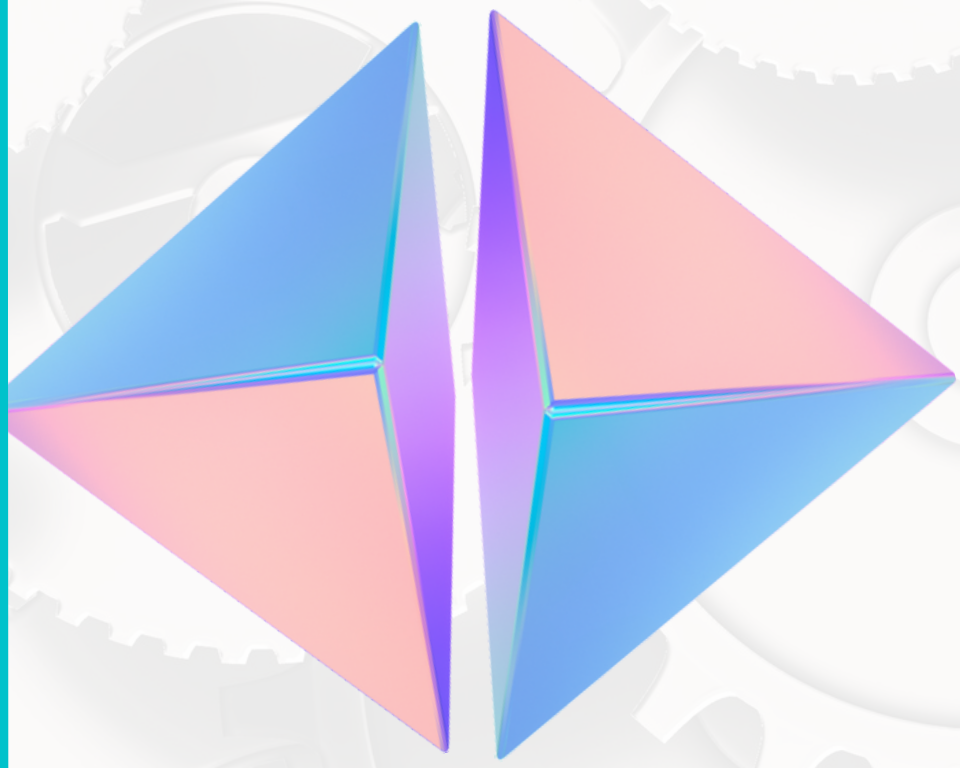
AJAY RAKHASIYA

SANSIDHDHI TECHNO CAST PVT. LTD.




RESULTS

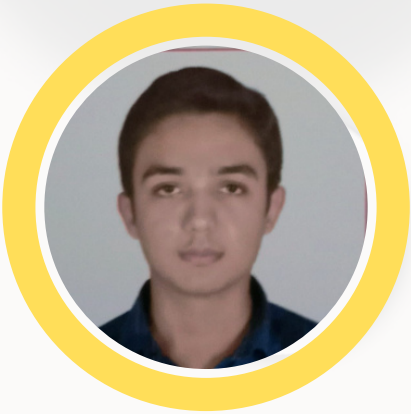
2ND SEMESTER - GTU RESULT
TOP 3 STUDENTS

KHERADIYA HARSH

10/10 SPI

MALAVIYA DHRUVIL

10/10 SPI



TILALA OM

10/10 SPI

ZINZUVADIYA KALPESH

10/10 SPI

UNAGAR SAGAR

10/10 SPI

4TH SEMESTER - GTU RESULT
TOP 3 STUDENTS

GHORECHA
MEET
9.65/10 SPI

SAKHARELIYA
RAJNISH
9.65/10 SPI

JANI
AKSHAT
9.43/10 SPI

DOSHI
HARSH

9.22/10 SPI

GADHIYA
JENISH

9.22/10 SPI

VYAS
SHREY

9.22/10 SPI

6TH SEMESTER - GTU RESULT
TOP STUDENTS

VOHRA
HUSSAIN

9.85/10 SPI

JADEJA
VISHWARAJSINH

9.70/10 SPI

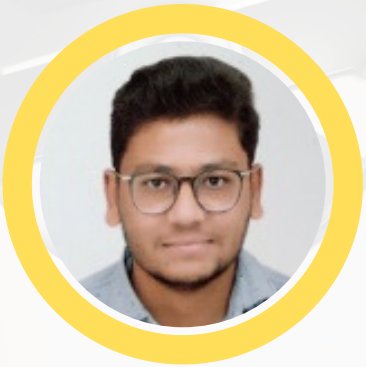
PATEL
KUSHANG

9.70/10 SPI

6TH SEMESTER - GTU RESULT
TOP 5 STUDENTS

GHADIYALI
KEVAL

10/10 SPI



HIRPARA
JENISH

10/10 SPI

KANTESARIA
NEVIL

10/10 SPI

HAMBHAITA
ADITYA

10/10 SPI

NAGVADIA
DIVYESH

10/10 SPI

PARIKH
DEEP

10/10 SPI

VANDAN
DUBAL

10/10 SPI

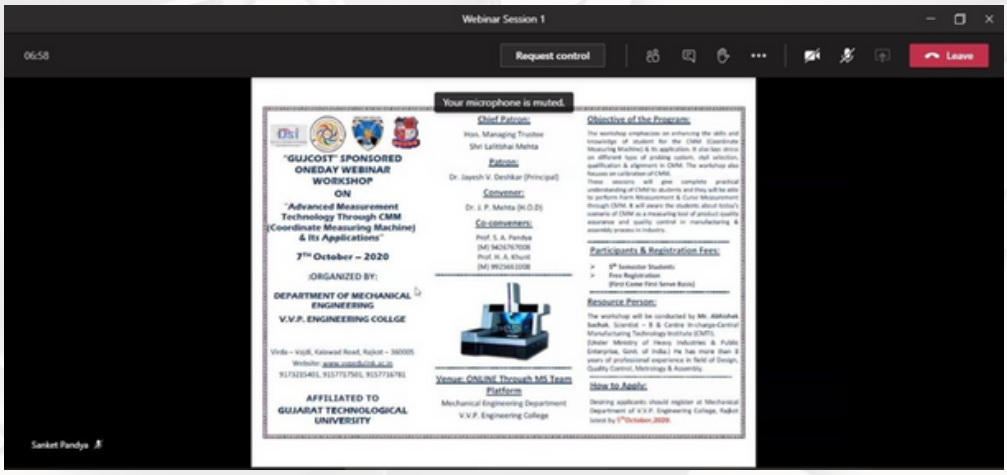
DEPARTMENTAL ACTIVITIES

ENERGY AUDIT LAB INAUGURATION

- Energy Audit Lab Deep Pragatya Ceremony by Dr. Navinbhai Sheth (Vice-Chancellor, GTU), Shri Maneshbhai Madeka(Managing Director, Rolex Rings Pvt. Ltd.) & Shri Lalitbhai Mehta(Managing Trustee)

- Energy Audit Lab Inauguration Ceremony by Dr. Navinbhai Sheth (Vice-Chancellor, GTU) & Shri Maneshbhai Madeka (Managing Director, Rolex Rings Pvt. Ltd.) Dr. Dipesh Kundaliya(Energy Auditor) is explaining the working of the Energy Audit Instruments to Shri Maneshbhai Madeka and Dr. Navinbhai Sheth.

EXPERT LECTURE ON "ADVANCED MEASUREMENT TECHNOLOGY THROUGH CMM (COORDINATE MEASURING MACHINE) & ITS APPLICATIONS"

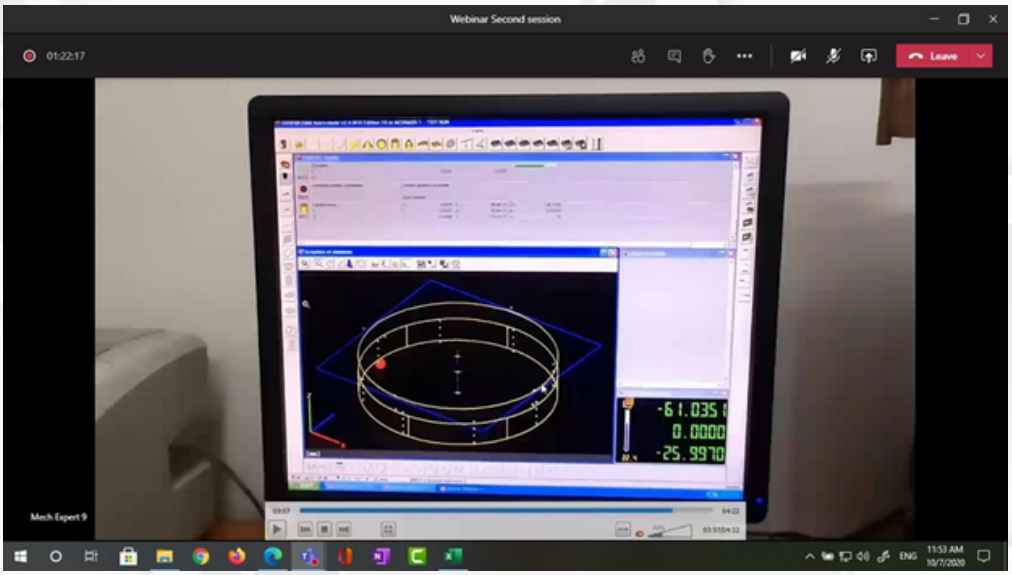


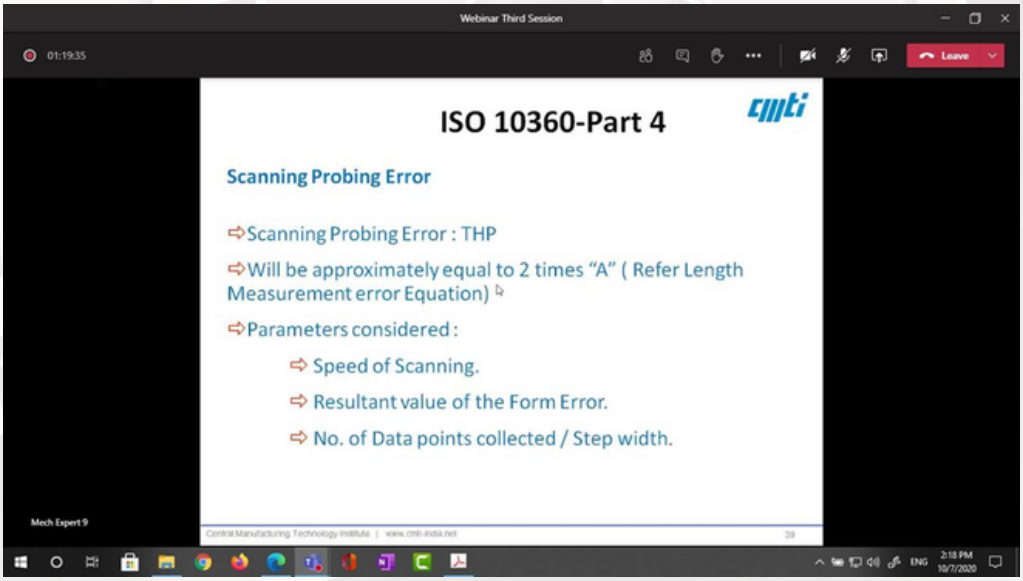
By : *Mr. Abhushek Suchak*
Scientist- B, Central Manufacturing Technology Institute (CMTI),Rajkot

Coordinator : *Prof. Sanket A. Pandya,*
Prof. Hardik A. Khunt,

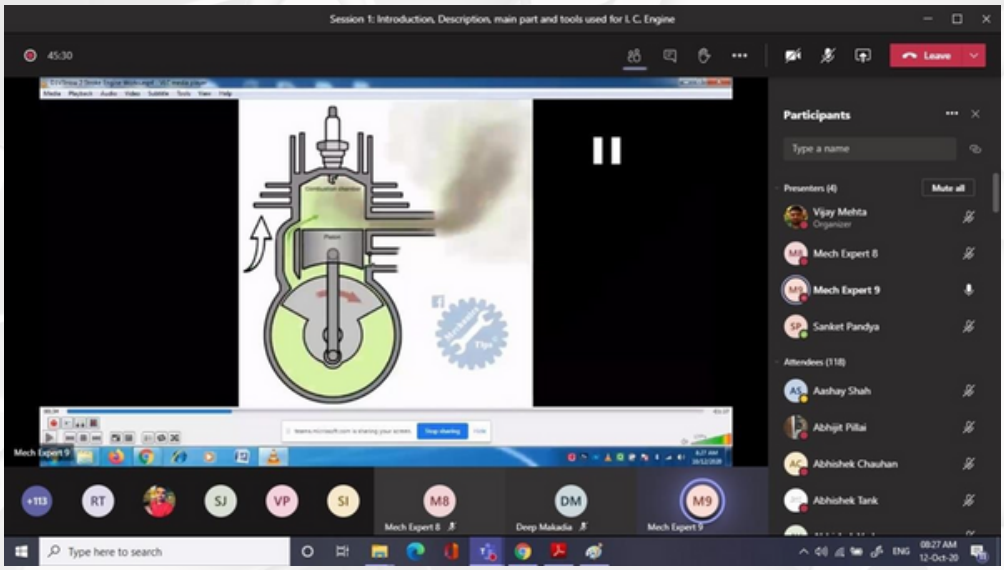
- A webinar on "Advanced Measurement Technology Through CMM (Coordinate Measuring Machine) & Its Applications" was arranged by Mechanical Engineering Department on 7th October 2020 for the 5th semester students of Mechanical Engineering Department, V. V. P. Engineering College, Rajkot.
- With the development of technology and science, higher accuracy is demanded in every field. Hence role of metrology and advanced measuring instruments is utmost important. Coordinate measuring machine (CMM) is well-known for its accurate measurements with lesser chances of error.
- This webinar was conducted with prime objective to give students insight of metrology and working & application of Coordinate measuring machine (CMM). Speaker for this webinar was Mr. Abhishek Suchak, who is working as Scientist- B in Central Manufacturing Technology Institute (CMTI), Rajkot. 126 students out of 141 have participated in this webinar through Microsoft Team online platform.

- In the 1st session students were given overview of metrology and its importance in industry. Also, different types of Coordinate measuring machine were discussed. In second session Mr. Abhishek Suchak explained working of CMM with different videos and discussed different types of measurement that can be done through CMM only. During third session of the webinar, he introduced the students with different calibration and alignment procedures. At the later part of webinar, there was Q&A session in which students gets opportunity to clear their doubt. Thus, this webinar has provided a platform to learn metrology and important aspects of advanced measuring technique





EXPERT LECTURE ON
"IC ENGINES AND TURBOCHARGER, EXHAUST SYSTEM OF CAR, CHANGES IN BS-VI"

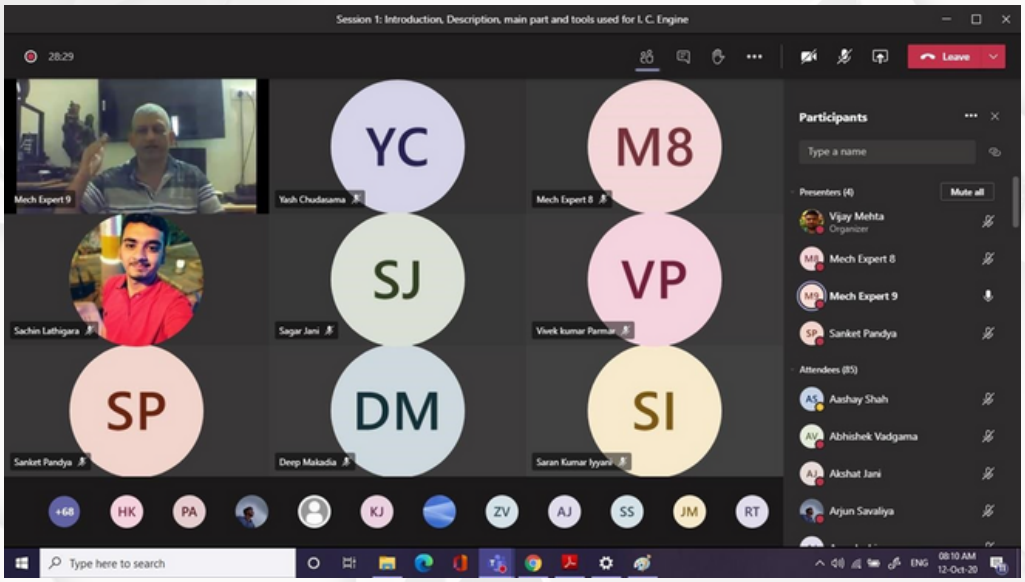


By : *Mr. Vijay Bhambri*
Director, Kritika Technical Academy, Nagpur

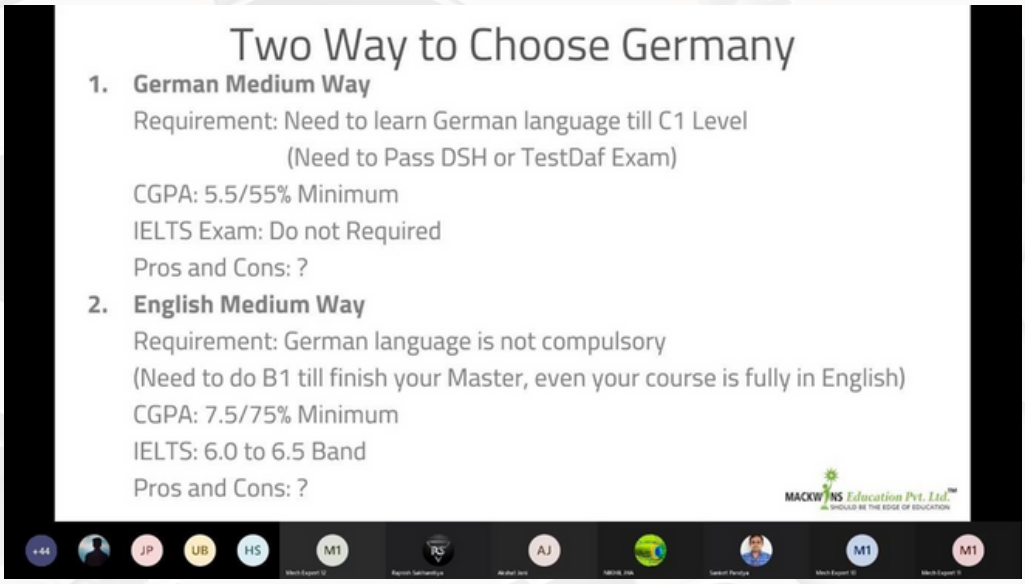
Coordinator : *Prof. Sanket A. Pandya, Prof. Vijay Mehta, Prof. Jiten Makadia*

- A webinar on "IC Engines and Turbochargers, Exhaust system of car, changes in BS-VI" was arranged by Mechanical Engineering Department on 12th & 13th October 2020 for the 5th & 7th semester students of Mechanical Engineering Department, V. V. P. Engineering College, Rajkot.
- With the development of technology and science in the field of IC engines, higher skill is demanded in every field. Hence knowledge in corresponding field is utmost important. currently almost all passenger cars are equipped with turbochargers which ultimately governs the exhaust system because of integrated technology. Along with, world being facing problem of environmental depletion in form of extreme amounts of carbon emissions, governments are coming with new norms of pollution, the latest being Bharat Stage -VI. Hence aforementioned topics were covered during the said workshop

- This webinar was conducted with prime objective to give students insight of latest technology in IC engines and emission norms. Speaker for this webinar was Mr. Vijay Bhambri, who is working as director of Kritika Technical Academy, Nagpur. 177 students have participated in this webinar through Microsoft Team online platform.
- The entire program schedule with corresponding topics are attached herewith. At the later part of webinar, there was Q&A session in which students gets opportunity to clear their doubt and even given insights about the questions which are generally asked in the interview.
- Thus, this webinar has provided a platform to learn latest technologies associated with IC Engines and Emission norms.



EXPERT LECTURE ON
"FREE ENGINEERING IN GERMANY"

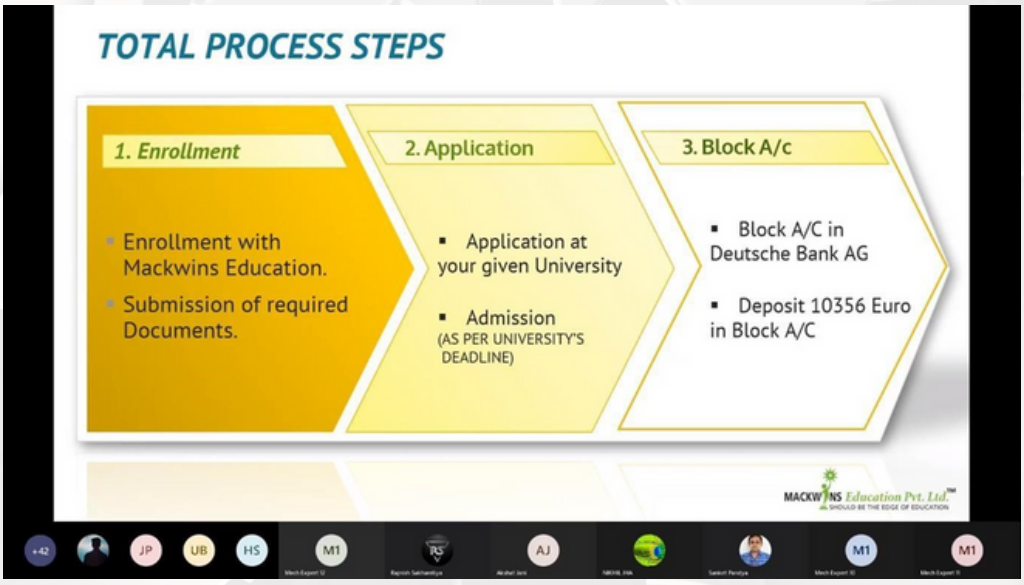


By : *Mr. Devang Gohil,*
CEO & Founder, Mackwins Education Pvt. Ltd.
Mr. Kiran Maradi
Branch Director,
Mackwins Education Pvt. Ltd., Rajkot.

Coordinator : *Prof. Sanket A. Pandya,*
Prof. Vijay Mehta,
Prof. Jiten Makadia
Date: 23-12-2020
Sem: 6th and 8th

- A webinar on "Free Engineering in Germany" organized by Mechanical Engineering Department in association with Mackwins Education Pvt. Ltd. on 23rd December, 2020 for the 6th & 8th semester students of Mechanical Engineering Department, V. V. P. Engineering College, Rajkot.
- Studying abroad helps students to learn new languages, appreciate other cultures, overcome challenges of living in another country and gain a greater understanding of the world. These are all things that modern businesses look for when hiring, and such traits will only become more important in the future
- This webinar was conducted with prime objective to give students insights of abroad study specifically in Germany. It was arranged in association with Mackwins Education Pvt. Ltd. Approx. 94 students attended this webinar through Microsoft Team online platform

- Speakers Mr. Devang Gohil, CEO & Founder and Mr. Mahesh, Kaklotar, Managing Director, Mackwins Education Pvt. Ltd. guided students for applying for study in Germany. They discussed about the benefits and opportunities to study in Germany, different universities, procedure to apply and what are the key points that students need to understand before applying. Mr. Kiran Maradia, Branch Director, Mackwins Education Pvt. Ltd., Rajkot, also shared experience of few students for getting admission in Germany.
- At the later part of webinar, there was Q&A session in which students gets opportunity to clear their doubt. Speakers have solved so many questions of students and was very interactive session.
- This webinar has provided a platform to know the opportunities and the procedure to study abroad.



EXPERT LECTURE ON
"CAREER GROWTH IN INDUSTRIES"

EXPERT LECTURE ON

"MANAGEMENT OF PROJECT TO SATISFY THE CUSTOMER NEED IN INDUSTRY"

V.V.P. Engineering College, Rajkot
Department of Mechanical Engineering

राष्ट्राय स्वाहा इदं न मम।

Webinar on Management of Project to satisfy the customer need in Industry

Honorable Speaker
Mr. Sandip Ghiya (General Manager)
Toshiba-JSW Power System Private Ltd.
Chennai

Objectives :

(1) To Understand the overview of project management to satisfy the customer need
(2) To Understand how to execute the project through management principles & concepts.
(3) To execute & apply the principles of management into one's own work for self growth.
(4) To demonstrate the knowledge of project management in multidisciplinary environment as a member and team leader

Date: 16th September 2020
Time: 4.30 pm

Mode of delivery : Team Microsoft
Participants : Students of pre final year and final year students

Convener
Dr. J. P. Mehta
Co-convener
Dr. R.V. Ramani

Organised by
Mechanical Engineering Department

WORKSHOP ON "FINISHING PRACTICAL SCHOOL"

- A one-day Workshop on "Finishing practical School" has been organized at the Department of Mechanical Engineering, V.V.P. Engineering College on 26th October 2020 for Diploma to Degree Students.
- The training focused on the following topics with an aim of practical knowledge.

Assembly and Disassembly of Internal Combustion Engine

Top-end engine disassembly is a process by which all the components of the top end of an engine are removed. Engine Assembly and disassembly is a task to make a needed understanding of all components in the IC Engine.

Friction Welding Process

Friction welding (FRW) is a solid-state welding process that generates heat through mechanical friction between workpieces in relative motion to one another, with the addition of a lateral force called "upset" to plastically displace and fuse the materials

.VMC Machining process

CNC machines with vertical machining centers (VMC) have vertically oriented spindles. VMC is useful for creating the parts, die, or molds with precision, accuracy, repeatability, and surface finishes.

3D Printing

3D printing, or additive manufacturing, is the construction of a three-dimensional object from a CAD model or a digital 3D model.

Energy Audit

Energy Audit attempts to balance the total energy inputs with its use and serves to identify all the energy streams in the systems and quantifies energy usage according to its discrete function.

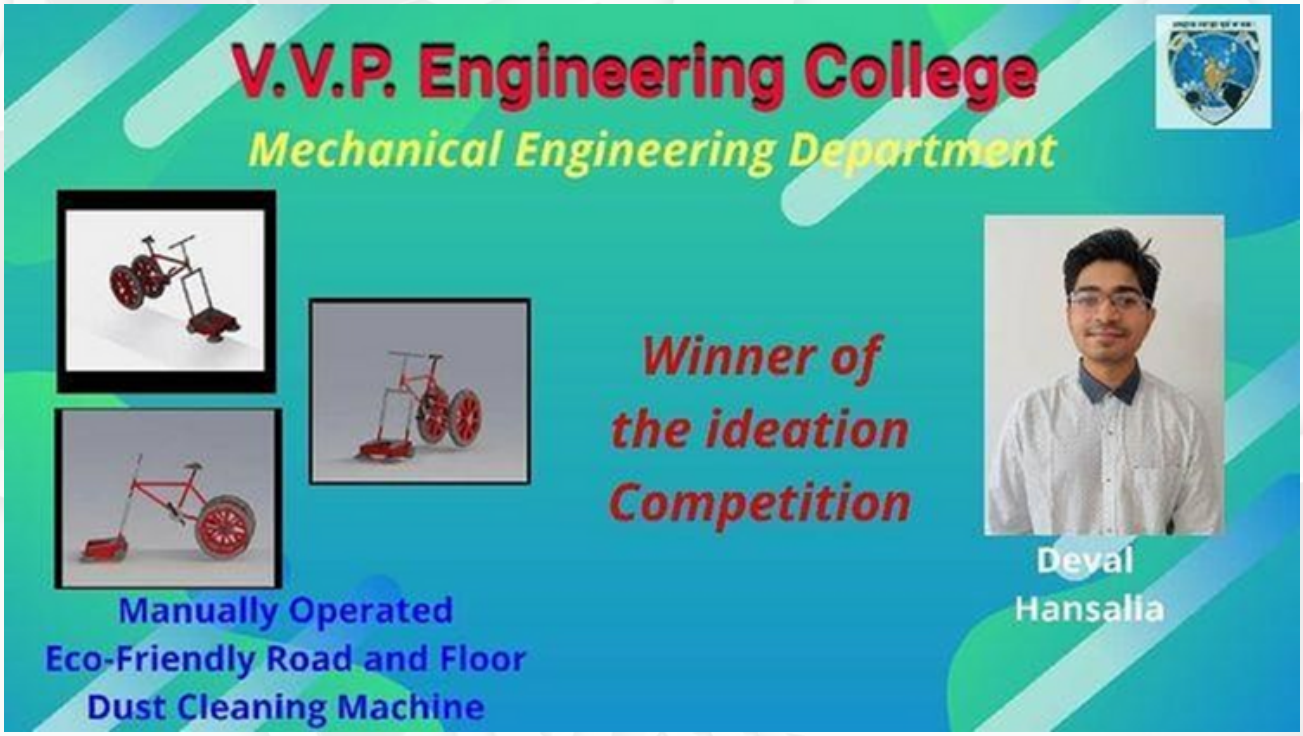
E-Yantra

e-Yantra Project is an initiative by IIT Bombay that aims to create the next generation of embedded systems engineers with a practical outlook, especially in Robotics to provide practical solutions to some of the real-world problems.

- With that above workshop was free for the diploma to degree students and e-certificates will be provided to all participants.

ACHIEVEMENT

WINNERS OF IDEATION COMPETITION



Date: 31-7-2020

વી.વી.પી. એન્જીનીયરીંગ કોલેજના વિદ્યાર્થીઓ માટેની પ્રતિજ્ઞા

પ્રિન્સીપાલ - ડો. જયેશ દેશકર દ્વારા રચિત....

V.V.P. ENGINEERING COLLEGE

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