

AUTOMOBILE ENGINEERING DEPARTMENT

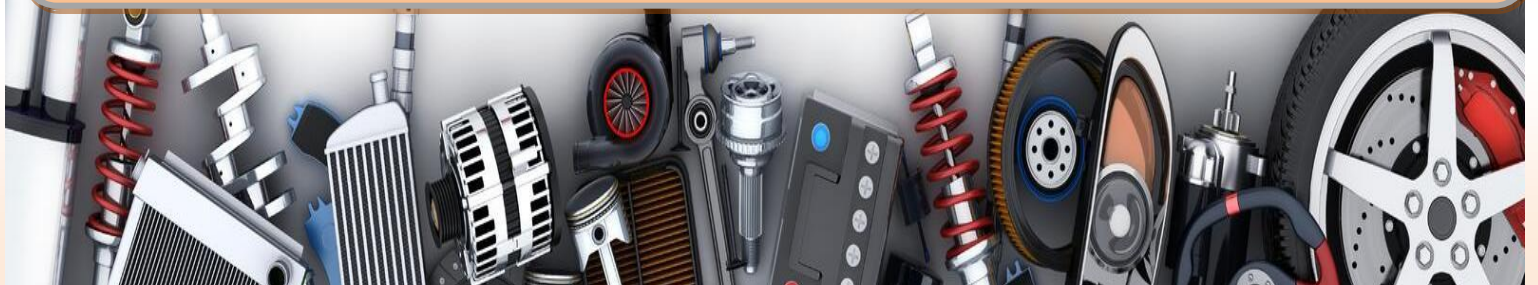


AUTO BULLETIN

E-Newsletter, Issue 5 | Jan-June 2022



DR. S. & S. S. GHANDHY COLLEGE OF
ENGINEERING & TECHNOLOGY, SURAT



Change to Charge

Dear All,

After so long, the campus is blooming with dynamic and cheerful crowd of students. Since January, 2022 all the students are coming to the institute and attending classes offline. Communicating with students face to face is a unique experience in its own. We are in a really happy space.

Automobile Engineering Department gears up its offline activities to nurture the students with multi-dimensional skill sets. Apart from theory and practical classes, department organized many activities ranging from inviting representatives from Hero Motocorp Ltd. to demonstrate latest advances in two wheeler technology and its maintenance to safe riding practices.

Industry people being so generous, permit us to visit their premises and make students aware of the actual world of work. Expert session on Motor insurance, survey and loss assessment was conducted by the practicing surveyor and loss assessor.

With the purpose of conserving the natural resources and to keep department surroundings clean and green, department conducted a drive under Eco club. Such activities create environmental awareness among future generations and build the lasting connection with the nature.

Students participated with utmost enthusiasm in each event be it department level final year student farewell or institute level fun-food festival, sports days or blood donation.

All this became possible by the endless efforts of highly efficient and motivated team of automobile department. The team works in quest for productivity and to keep pace with the ever changing and unpredictable world.

Wish for the longest happy space.....

Mrs. Sweety Ganatra
*Head Of Department,
Automobile Engineering*

“Change is the only constant in life”

-Heraclitus

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Editor in Chief

Mrs. S.S.Ganatra (HOD)

Editor

1. Chandrakant Patel (LAE)
2. Arpitkumar Patel (LAE)

Student Editor

1. Manav Patel (5th Sem)
2. Yash Solanki (2nd Sem)

KNOW THE DEPARTMENT

Automobile Engineering Department established in 1958, is one of the pioneering departments of Dr. S. & S. S. Ghandhy College Of Engineering And Technology, Surat. Institute is running under Department of Technical Education, Government of Gujarat and is affiliated to Gujarat Technological university-Ahmadabad. Diploma automobile engineering program is **Accredited by National board of Accreditation (NBA), New Delhi for 3 years (2021-2024)**. The program is approved by All India council for technical education (AICTE), New Delhi. The department has qualified faculty members engaged in teaching learning process with the aim of achieving excellence in the field of automobile engineering.

VISION

“To be a center of excellence in technical education to prepare diploma automobile engineers with innovative technical and professional skills suitable to automotive industry and the society.”

Program Educational Objectives

The program in Automobile Engineering will prepare students

1. To make successful career in the field of Automobile service, Manufacturing, Road Transport, Motor Insurance and allied automobile sector.
2. To pursue and excel in higher education for their professional development.
3. To demonstrate professional ethics and ethos with life-long learning, contributing to the betterment of the society.

MISSION

1. To impart globally viable technical core competencies and skills related to Automobile Engineering.
2. To provide scholarly and vibrant learning environment for achieving professional excellence and innovation.
3. To strengthen the institute – industry relation to stay updated with dynamic behavior of automotive sector.
4. To inculcate professional ethics and moral values amongst the students.

Program Specific Outcomes

Diploma Automobile graduate will be able

1. To identify, test, analyze and solve problems related to vehicle service.
2. To inspect road transport and conduct motor insurance survey.

Know the Faculty

Automobile Department



Mrs. S.S. GANATRA (HOD)



Mr. G.A. KAPADIA (LAE)



Mr. J.G. KEDARIA (LAE)



Ms. S.S. MAITRA (LAE)



Mr. R.J. LADUMOR (LAE)



Mr. K.V. JADAV (LAE)



Mr. C.A. PATEL (LAE)



Mr. S.K. MODI (LAE)



Mr. A.D. PATEL (LAE)



Mrs. N.M. DANGARIA (LAB ASST.)



Departmental Curricular Activities

One day Workshop on **“MOTORBIKE MECHANICS & MAINTENANCE”**

Date- 29/03/2022

Coordinators- Mr.S.K.Modi(LAE)
Mr.R.J.Ladumor(LAE)

Expert Invitee

1. Ms. Bhavana Salvi (Territory Manager)
2. Mr. Sachin Rajpara (Area Learning Manager)
3. Mr. Snehal Patel (Proprieter)
4. Mr. Ahmad Bham (G.M.)
5. Mr. Krunal Chauhan (W.M.)

Jalaram Auto, Authorized Dealer of HERO MotoCorp Ltd.(HMCL)

A Workshop on Motorbike Mechanics & Maintenance providing on hand practice of motorbike maintenance was organized by automobile engineering department.

Major learning outcome:

1. Latest technological advances in two wheeler technology
2. Hands on maintenance techniques.
3. Nuances in maintenance techniques with advancements in vehicle technologies.
4. Diagnosis for common troubles.
5. Ethical practices in Motorbike repair sector.
6. Things to check before beginning a ride.



We Repair Your Dreams

A PROGRAMME ON SAFETY RIDE

Date- 29/03/2022

Coordinator - Mr.S.K.Modi(LAE)

Expert Invitee

1. Mr. Snehal Patel (Proprietor) 2. Mr. Ahmad Bham (G.M.) 3. Mr. Krunal Chauhan(W.M.)

Jalaram Auto, Authorized Dealer of HERO MotoCorp

A programme on how to ride safely respecting transport rules, caring best for people and the vehicle, was organised by automobile department.

➤ Insights

1. Traffic rules & regulations preventing damage to our life as well as others.
2. Tips on riding techniques that can keep your vehicle healthy minimizing maintenance.
3. Driving techniques that can reduce accident chance.
4. Some devastating driving mistakes that we often ignore.
5. Know-how of vehicle safety features.



Program gives hands on experience of driving hacks that can be proved life saving. Technical Experts from Jalaram Auto, an authorized HERO MOTORCOP LTD. shared valuable practical inputs along with vehicles enriching psychomotor skills of driving for all.



Safe Roads for All

SEMINAR ON INDUSTRIAL TRAINING FOR 5th SEM

Date- 07/03/2022

Coordinator- Mr.G.A.Kapadia (LAE)



As a part of curriculum of Diploma Automobile Engineering, all the students of 5th semester have to undergo industrial training at selected service center/workshop for whole 5th semester.

An industrial training is one of the most important components for developing psychomotor skills in students and exposing them to real technical work space. A seminar to guide and motivate students regarding safety precautions to be followed at workspace and ways to translate cognitive theoretical concepts into actual performing practice to gain maximum learning. Students also acknowledged with importance of Industrial training and simultaneously informed with attendance, daily diaries, and reports to be prepared as a part of curriculum.

EXERCISE ON RESUME PREPARATION

Date- 29/03/2022

Coordinator - Mr.R.J.Ladumor (LAE)

Beneficiary- 6th Sem Students (Auto Department)

An exercise for resume preparation was organized for final year students. Students acknowledged with various key things that must be reflected within resume. Various sample formats of resume shared and explained to students for further inputs.

WEBINAR ON “FUTURISTIC ELECTRIC VEHICLE TECHNOLOGY”

Date: 05/03/2022

Coordinator- Mr.K.V.Jadav (LAE)

Expert Invitee

Dr. Sanjay Patel (HOD Automobile Engg., A.D.I.T College, Vallabh Vidyanagar)

Automobile Department organized a webinar on “FUTURISTIC ELECTRIC VEHICLE TECHNOLOGY” to discuss the transformation of vehicle technology & automobile industry at large towards electric powered vehicles.

Key topics like Battery swapping Policy, barriers to electric mobility and ways to overcome it, technical aspects of electric vehicle, battery disposal policy, and nuances in technologies of electric vehicles were discussed during seminar. Nearly 92 students of automobile department along with faculty staff participated in event.

DR. S. & S. S. Ghandhy College of Engineering and Technology, Surat

AUTOMOBILE ENGINEERING DEPARTMENT ORGANIZES
A Webinar on
“Futuristic Electric Vehicle Technology”

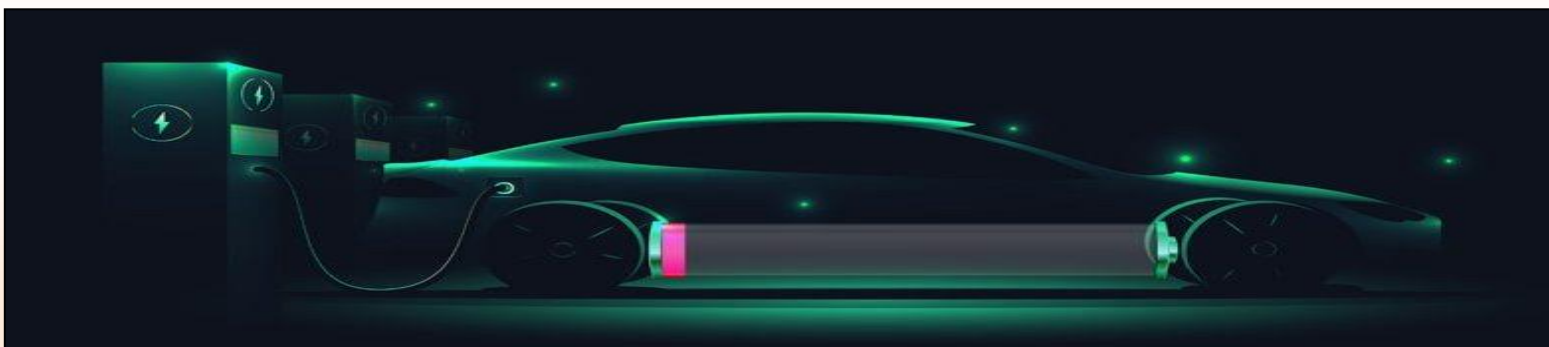
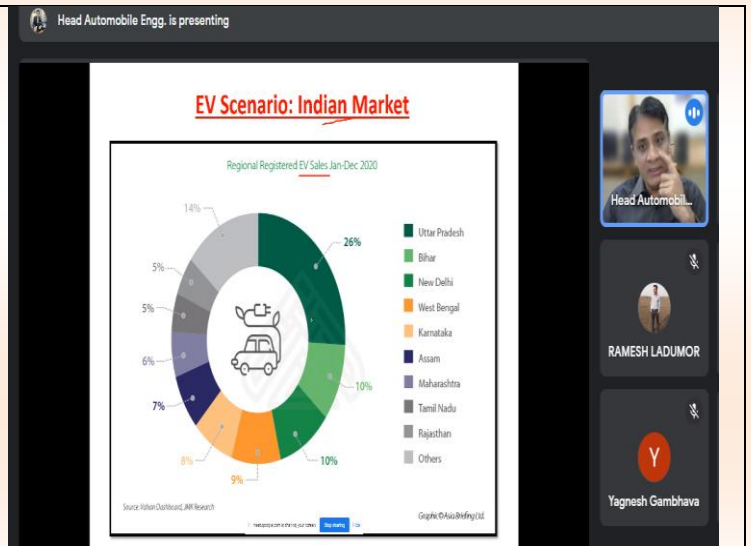
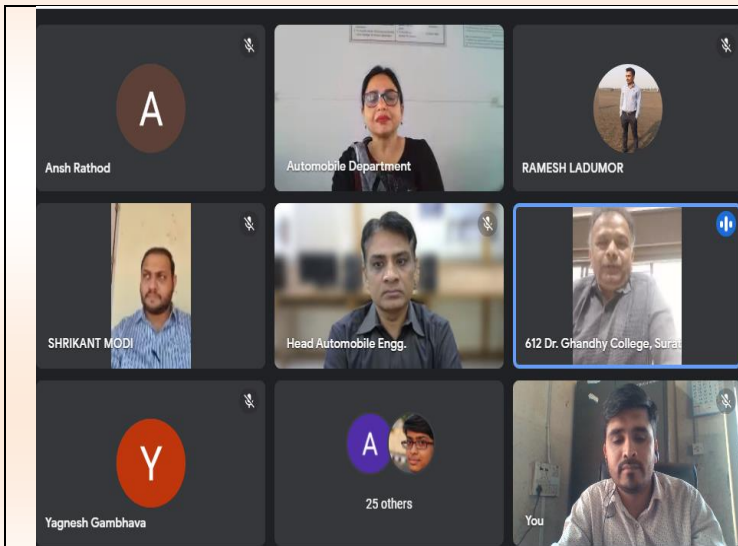
EXPERT SPEAKER
Dr. Sanjay Patel
Head of the Department,
Automobile Engineering,
A.D. Patel Institute of Technology,
(A Constituent college of CVM University)
New V V Nagar, Gujarat.

PATRON
Mr. N.A.Sangani
Principal
Mrs. S.S.Ganatra
Head, Automobile Engg.
DR. S. & S. S. Ghandhy College of
Engineering and Technology, Surat

Registration Link:
<https://forms.gle/HMG4fm3DUzKv7kc6>

Date: 5/3/2022
Time: 11:00 AM

Program Coordinator:
Mr. Kiran Jadav
Lecturer, Automobile Engineering Department,
DR. S. & S. S. Ghandhy College of Engineering and
Technology, Surat
9727712005

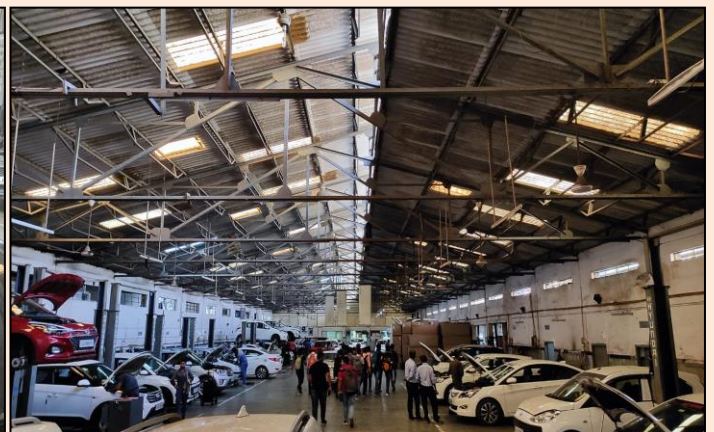


INDUSTRIAL VISITS

- **Industry** - Bombay repowering (Near Rayka Circle,Bamroli Road, Udhna, Surat)
- **Industry Contact Person-** Mr.HemantbhaiAdhvaryu (Proprietor)
- **Co-ordinator-** Mr. G. A. Kapadia (LAE) , Mr. S.K.Modi (LAE)
- **Semester-6th** **Date-01/01/2022**
- **Learning outcomes-**
 1. Cylinder Boring operation
 2. Safety at Workshop
 3. Valve Operation
 4. Engine Reconditioning



- **Industry** - Navjivan Motors Pvt. Ltd. Authorized Service Center Hyundai.(Opp. Khatodara Police Station,NearChosathJogani Mata Temple,U. M. Road, Surat)
- **Industry Contact Person-** Mr.VimalNaik (Asst. Manager / Warranty Head)
- **Co-ordinator-** Mr. G. A. Kapadia (Lecturer in Automobile)
- **Semester- 4th** **Date- 20/04/2022**
- **Learning outcomes-**
 1. Wheel Alignment
 2. Basics of Engine Trouble diagnosis
 3. Vehicle Repair
 - 4.Various hydraulic and pneumatic tools



- **Industry** - Raycon Services (Hare Krishna Complex, Nr. Mahatma Gandhi Soc. Opp. Chandan Park, City Light, SURAT)
- **Industry Contact Person-** Mr. Shashikant Gohil (Proprietor)
- **Co-ordinator-** Mr. G. A. Kapadia (Lecturer in Automobile)
- **Semester-6th** **Date-** 05/01/2022
- **Learning outcomes-**
 1. Compressor service
 2. Air conditioning troubles
 3. Gas recharge and leak detection
 4. Evaporator and condenser servicing



EXPERT LECTURE

Date-27/01/2022


Coordinator- Mr. S.K.Modi (LAE)

Expert Invitee

Mr. Bhavesh Pandav (Surveyor and Loss assessor)


Webinar on vehicle insurance and survey was organized through online platform MS TEAMS.

Various key things like claim procedure, On spot inspection, claim settlements, loss assessment were explained thoroughly to students. The sector being one of career option for automobile students, the webinar proved very useful for future paths.



**Dr. S. & S. S. Ghandhy college
of Engg. & Tech., Surat.**


Automobile Engg. Department




*Online Expert Lecture
On
"Vehicle Insurance
and Survey"*

*Join to us on MS
Team:
<https://bit.ly/VehicleInsuranceandSurvey>*


Date: - 27-01-2022
Time: - 11:00 A.M. to 01:00 P.M.



Patron:
Mrs. Sweety S. Ganatra
(HOD Automobile Department)



Expert:
Mr. Bhavesh Pandav
(Surveyor and Loss Assessor)



Coordinator:
Mr. Shrikant K. Modi
(Lecturer Automobile Department)

Departmental Extra- Curricular Activities

ECO CLUB- GARDEN RESTORATION

Date- 24/02/2022

Coordinator- Ms. S.S.Maitra (LAE)

A cleanliness drive conducted to clean the surrounding area of Automobile classroom. Garden cum seating area for students created in the backyard of classroom.



Seminar on “How to prepare for Competitive exams (GPSC)”

Date- 25/02/2022

Coordinator- Mr.K.V.Jadav (LAE)

Considering trend of today’s students to learn towards competitive examinations, Automobile department organized a talk to guide students on tips to excel in such exams, simultaneously making them aware of other sides associated with such path.



Few of tips shared were:

1. Revise and Give Mock Tests
2. Know Something of Everything
3. Divide your goal into sub steps
4. Make your own Strategy

“Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.”



*Aim for Moon, if you miss you may hit
a Star*

FACULTY DEVELOPMENT PROGRAM



1. Faculty Training

- ✓ Training title- Train the trainer for faculty at International Automobile Centre of Excellence- iACE.

Duration-28/3/2022 to 01/04/2022

Participant Faculty- Ms. S.S.Maitra (LAE)

2. Higher Education

- ✓ Mr. C.A.Patel (LAE) Deputed For Pursuing Higher Education, Masters Of Engineering In Mechanical (I.C.Engine & Automobile).

FUN & FOOD FESTIVAL – 2022

Date- 16/03/2022

Participants- College students & faculties

Coordinator- Ms.S.S.Maitra(LAE)

Venue- Multipurpose Dome,SSGP,surat

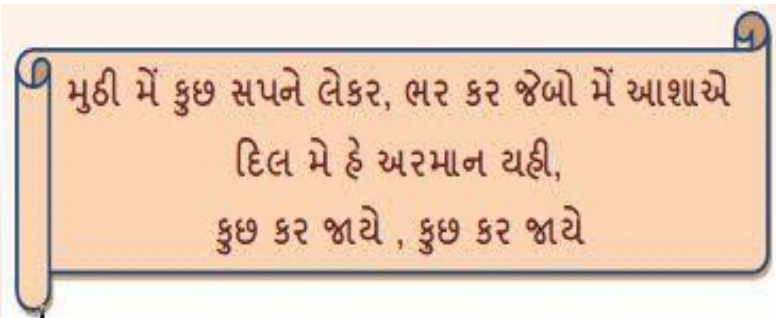
Dr. S. & S. S. Gandhi College of Engineering & Technology, Surat organized “FUN & FOOD FESTIVAL – 2022” under the guidance of Principal sir Shri N. A. Sangani on 16th March, 2022. Event was coordinated by Ms.S.S.Maitra (LAE) with the support of other faculties of institute. This event had 42 entries of different types of food dishes and 11 entries of fun activities like open mic, dancing, singing and musical activities.



FAREWELL TO FINAL YEAR STUDENTS

Date- 07/04/2022

An event organized by students to bid farewell to final year students. Memorable experiences were shared by students as well as faculties.



Community Services

1. Blood Donation

Blood Donation Camp was arranged by NSS cell, NCC and Bhutpurva Vidhyarthi Mandal in collaboration with Surat Rakatdan Kendra on 4/1/2022.

Departmental Faculty Mrs.S.S.Ganatra(HOD), Mr.G.A.KAPADIA(LAE),Mr.R.J.Ladumor (LAE) and 8 students contribute their part.



2. Anti Alcohol-Nicotin Campaign

Under the Azadi ka Amrit mahotsav, awareness campaign to not use of alcohol and nicotine-based material was organized by NSS volunteers at Devadh village on 12/04/2022. Departmental students enthusiastically participated in the campaign.



3. Vaccination Camp

Mass COVID vaccination program organized at institute on 12/01/2022. All the students of Automobile department took the dose and contribute towards creating COVID resilient campus and society.



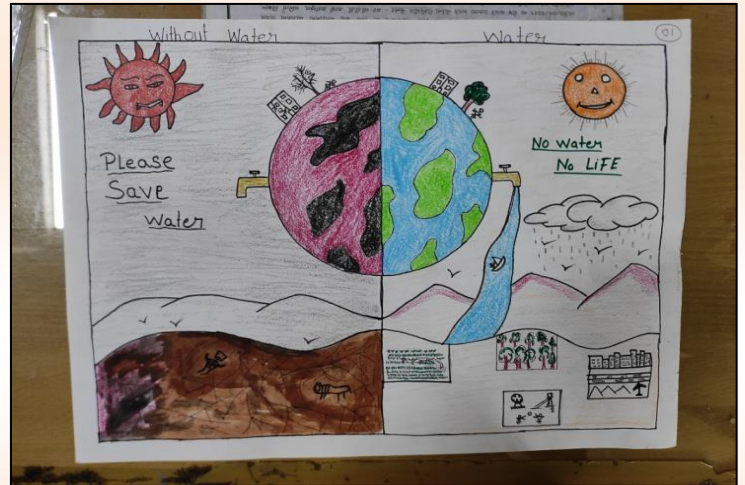
STUDENTS PARTICIPATIONS

1. Water Conversation- Making the Invisible Visible

Department students express water conservation awareness through their creative arts in poster making competition organised at institute level.



Harikrishna Swaminarayan (1st sem)



Shreyas Dhavale(4th sem)

2. TECH –FEST participation

- 'ANVESHAN-2022' , *TECH FEST* on 21-22/04/2022 at Government Engineering College, surat. Students participated in various events like Hot Wheels, Finding Nemo, Wire Buzz, Laser Warfare and enjoy technical games.
- 'INSPIRE 2022', *TECH FEST* on 11-12/04/2022 at C.K.PITHAWALA COLLEGE ,SURAT . Students Participated in technical games Treasure Hunt, Box Cricket, NFS.



3. Essay competition on “freedom Fighters”

Institute level essay competition, coordinated by Mr. K.V.Jadav, LAE was organized on 27/01/2022. Automobile department student Rajesh Desai(196120203013) express his views in coherant manner.

4. Students Projects

1. Demonstrative Model of Airbag System

Guided by- Ms. S. S. Maitra, LAE

Students prepared demonstrative model explaining air bag operation consist of relay operated electronic cut off circuit which cut off the electrical supply after airbag gets inflated.



2. Intelligent Braking System

Guided by- Mr.R.J.Ladumor, LAE

Intelligent Braking System is an advance Safety feature which is there in some Luxury cars. This feature is just sensing the Accident by using the Proximity Sensors & Apply brakes before Driver. Students build up actual prototype exhibiting features.

3. Electromagnetic shock absorber

Guided by- Mr.K.V.Jadav, LAE

Students prepared model of Electromagnetic shock absorber in which repulsive forces from same poles of permanent magnets/electro magnets are used for absorbing the heavy shock loads. Such technology proved very useful for vehicles carrying heavy weight and experiencing sudden shocks.



Links worth sharing

Innovative Technologies & Trends In Automobile

1. Head up display- <https://www.youtube.com/watch?v=S9kS5-AE81M>
2. Toyota hydrogen Car- <https://www.youtube.com/watch?v=HfnJm7WjOcs>
3. Toyota hybrid- https://www.youtube.com/watch?v=XFVd_fCiO88
4. How electric car work- <https://www.youtube.com/watch?v=tJfERzrG-D8>
5. Top new car technologies- <https://www.youtube.com/watch?v=92IJSTQXaZk>
6. Volvo axle- <https://www.youtube.com/watch?v=AvgDYT83mq5>
7. Connected car - <https://www.youtube.com/watch?v=Q8Cn47L8FRQ>