



We Make The World To Move

VAAHAN

Automobile Engineering Newsletter

January - June 2020, Issue No. 2

**A. D. Patel Institute of Technology,
New V. V. Nagar, Gujarat**

FROM THE DESK OF PRINCIPAL



I heartily congratulate to Automobile engineering department, ADIT for release of second issue of department newsletter. The members of ADIT automobile engineering fraternity are contributing to various national and multinational companies in auto sector passionately. The department has well – equipped laboratory with state of the art instrumentation where students are imparted practical and hands on experience. Students have been participating in mega events like SAEBAJA, SUPRASAE, ATV and winning lead positions. I congratulate the department on bring out the newsletter which will enable stakeholders to get aware about the achievements of faculty and students of the automobile engineering department.

Dr.V.N. Singh
Principal

FROM THE DESK OF THE HEAD OF DEPARTMENT



After successfully releasing 1st issue of the newsletter, I am very happy to bring out the second issue of the Automobile Engineering Department Newsletter “VAAHAN”. This newsletter outlines various activities that have taken place during the period of January-June, 2020 and the achievements of faculties and students. I appreciate all the team members for their efforts in bringing out this newsletter. Department of Automobile Engineering is putting all kind of efforts to ensure the overall progress of the students. Department of Automobile Engineering is thankful to Principal, Dr. V N Singh and Charutar Vidya Mandal, Vallabh Vidyanagar for providing all kind of facilities and support as and when needed. I wish that this activity of publishing the Newsletter will continue in future and will work as a platform for faculty members and students to show their work.

Dr. S.M Patel
Head, Automobile Engineering Department

MESSAGE FROM EDITORIAL BOARD



It is with profound pleasure, humility and anticipation that we in position to release second issue of newsletter. I take this opportunity to thank my faculty colleagues who have contributed for compilation of necessary data. I would also like to express my sincere gratitude to Dr. Sanjay Patel, Head of the Department.

Prof. Kuldip D. Patel,
Assistant Professor-AE

ABOUT CHARUTAR VIDYAMADAL

One of the greatest sons of India Late Sardar Vallabhbhai Patel inspired Shri Bhaikaka and Shri Bhikabhai Saheb for rural resurgence of post-independent India through education, and Charutar Vidya Mandal was born. Charutar Vidya Mandal was established in the year 1945 as a charitable trust with a prime objective of rural development through education to bring about the social awakening, social upliftment and enrichment. The uniqueness of Charutar Vidya Mandal lies in its ability to use quality education as a powerful means of social transformation. It was a stupendous task for the founders to establish a visionary organization; but the large-heartedness and high sense of philanthropy of this region made this possible. Over the subsequent years, Late Dr. H M Patel consolidated the efforts put in by the founders. Later on, in the 1990s, when Late Dr. C L Patel took over the reins of Charutar Vidya Mandal as the Chairman, the country was facing a major economic and ideological change paving the way for globalization and liberalization.

Today Charutar Vidya Mandal is empowering budding graduates to live up to the ever-changing environment and equipping them to face the Third Millennium with confidence and competence. Building competitive advantages is the renewed focus of Charutar Vidya Mandal in the 21st century. At present, Charutar Vidya Mandal operates under the chairmanship of Er. Bhikhubhai B. Patel. 50 Educational Institutes starting from nursery to higher education and a sophisticated Research Institutes along with over 30,000 students on the rolls. *CVM University was inaugurated on the day of Platinum Jubilee celebration of Charutar Vidya Mandal by Hon. Vice President of India.*



Release of 1st issue of Automobile newsletter, "VAAHAN" by Er. Bhikhubhai Patel, Hon. Chairman-CVM in BOM meeting on 13.03.2020.

GLIMPSES OF INAGURAL CEREMONY OF CVM UNIVERSITY



ABOUT NEW VALLABH VIDYANAGAR

New Vallabh Vidyanagar - a self contained satellite township established under the dynamic leadership of visionary Chairman of that time Late DR. C. L. Patel who believed in ‘Think Globally and Act locally’. The campus spans over 100 acres of area and located behind the industrial belt of Vithal Udyognagar. This campus encompassing various institutes of advance learning including Engineering, Pharmacy, Biotechnology and Allied Sciences, Ayurved, Architecture and Interior design, Business and hospitality management and research institute on renewable energy. The campus is also equipped with Boy’s and Girl’s hostels with mess, staff apartments, Principal’s Bungalow, amenity building with shopping and medical facilities and landscaped public garden. This township is a nourishing ground for budding technocrats which are going to play pivotal role in the future of the region and state in particular and country in general.

ABOUT INSTITUTE

A D Patel Institute of Technology is one of the pioneering institute imparting technical education in the state of Gujarat, India. It is established in the year 2000 and managed by Charutar Vidya Mandal (CVM), one of the leading trust of the nation established in 1948. The institute is located in satellite township of New Vallabh Vidyanagar having green natural environment and beautiful landscape near educational hub of the state, Vallabh Vidyanagar and Milk city Anand. Institute offers B.E. courses on Electronics and Communication Engineering, Computer Engineering, Information Technology, Electrical Engineering, Mechanical Engineering, Food Processing Technology, Civil Engineering and Automobile Engineering.

VISION:

To add significant our enduring civilized tradition of pioneering excellence in learning, knowledge, enlightenment and self-realization in a universally relevant context.

MISSION:

We dedicate to the perpetuation of our founder’s vision of providing the infrastructure, facilities, operation conditions and overall conducive environment to conduct education for young scholars along with the desired physical, mental & character building inputs; we firmly renew our commitment to providing value added globally relevant education with an emphasis on the Techno-Management domain to ensure that our scholars fruitfully exercise their knowledge, skills & values in the global economy.

ABOUT AUTOMOBILE ENGINEERING DEPARTMENT

The department of Automobile Engineering was started in academic year 2003-2004. Department is having young and well qualified teaching faculties and well equipped laboratories.

OUR VISION:

Instil enduring values and excellence in learning fundamental knowledge of automobile engineering, in universally relevant context for industry and society.

OUR MISSION:

- Creating conducive environment for learning practical applications of latest technology through state-of-the-art laboratory facilities
- Providing opportunities for interaction with industry experts, visits to automotive industry and automotive research organizations
- Motivate and support students for participating in National level competition events for out of classroom practical learning for hands-on practice and development of a professional with ability to work in team and problem solving

DETAILS OF STAFF MEMBERS

Name of faculty	Designation	Qualification	Experience
Dr. Sanjay M Patel	Asst. Professor & Head	Ph.D.	20 years
Dr. Ajith Tom James	Asst. Professor	Ph.D.	19 years
Dr. Nimit M Patel	Asst. Professor	Ph.D.	15 years
Mr. Nikunj S Yagnik	Asst. Professor	M.E, Ph.D. (Pursuing)	15 years
Mr. Mahesh R Phogat	Asst. Professor	M.Tech, Ph.D. (Pursuing)	10 years
Mr. Yagnesh J Gambhava	Asst. Professor	M.E, Ph.D. (Pursuing)	9 years
Mr. Samarth J Shelat	Asst. Professor	M.Tech	9 years
Mr. Simit B Prajapati	Asst. Professor	M.E, Ph.D. (Pursuing)	9 years
Mr. Kuldeep Patel	Asst. Professor	M.E, Ph.D. (Pursuing)	10 years
Mr. Sailesh M Patel	Foreman	B.E.	19 years
Mr. Paresh I Patel	Lab. Assistant	ITI	15 years
Mr. Mahavir Patel	Lab. Assistant	Diploma	4 years

INDUSTRIAL VISITS

Sr.	Name of Industry/Company	Date of Visit	No. of Students / Level	Name of Faculty/Staff Members
1	<ul style="list-style-type: none"> • AMUL Chocolate factory, Mogar • Phoenix Frozen food, Mogar 	24.01.2020	40 (Third)	Prof. R.Balasubramanian Prof. S. J. Shelat
2	C.M. Smith and Sons. Ltd., Nadiad	29.01.2020	54 (Second)	Prof. Kuldeep D Patel Prof. Mahesh Phogat
3	EME (Army Training Centre), Vadodra	19.02.2020	45 (Second)	Prof. S. B. Prajapati Prof. Mahesh Phogat



AMUL Chocolate factory, Mogar planned for 3rd year students on 24.01.2020



Phoenix Frozen food, Mogar planned for 3rd year students on 24.01.2020.



C.M smith and Sons Ltd, Nadiad planned for 2nd year students on 29.01.2020

EXPERT TALK

Sr.	Activity	Date	Name of Expert	Remark
1	3-Days workshop on "Computer Aided Design"	7-9/01/2020	Nirav Sharma Managing Director, Krishna CAD Centre, Vallabh Vidyanagar	
2	Career opportunities for Higher Studies at Germany	03/01/2020	Adil Rana Master in Renewable Energy & Energy Efficiency, University of Kassel, Germany	ADIT (Alumni)

WEBINARS

1	Automobile Engineering and its Scope	21/4/2020 to 28/4/2020	Dr. Sanjay M. Patel Dr. Nimit M. Patel Prof. Mahesh Phogat Pro. Samarth J. Shelat Prof. Simit B. Prajapati	
2	Automobile Engineering and its Future Application	1/5/2020 To 3/5/2020	Prof. Nikunj Yagnik Prof. Yagnesh Gambhava Prof. Kuldeep Patel	

3	Developments in Automobile Engineering	18 to 20/5/2020	Dr. Ajith James Prof. Mahesh Phogat Prof. Simit Prajapati	
4	Basics of Automobile Engineering	25/5/2020 to 30/5/2020	Dr. R.Balasubramanian Prof. Yagnesh J. Gambhava Prof. Samarth J.Shelat Prof. Nikunj S. Yagnik Prof. Simit B. Prajapati Prof. Kuldeep Patel	
5	Electrification Technology For Two Wheeler	17/5/2020	Mr. Dheyey Pandya Technical Officer, ABZO Motors Pvt. Ltd	COE in E- Mobility
6	New BS-6 Car Emission Cleaner Than Delhi AIR: □□□ □□ !!!	20/5/2020	Mr Dushyant Bhatt Power train Testing Engineer, Mercedes Benz R & D India	ADIT (Alumni)
7	Role of Youth in Road Safety	24/5/2020	Mr Amar Srivastava B. Tech IIT Delhi Founder and President Indian Road Safety Campaign	COE in Road Safety
8	Basics of BS-VI: Working & Requirements	31/5/2020	Mr Akash Dave PT& E Engineer , Escort Ltd.	SAE & ISTE
9	Let Us Be Responsible Be First Responder	14/6/2020	Dr Pravin Kanabar Orthopaedic Surgeon, President Active Traffic Consultative Committee	COE in Road Safety
10	Painting Process in Automotive OEMs	14/6/2020	Mr Aditya Shukla Sr. Manager (Quality), Tata Motors, Sanand	ADIT (Alumni)

Department of Automobile Engineering presents,
Webinar on

**NEW BS-6 CAR EMISSIONS
CLEANER THAN DELHI AIR: 43% तक**

No Registration Fees!
Join Zoom Meeting:
<https://bit.ly/35YZc7K>
Time: 20th May 2020, 11:00 am
Organised By: ISTE Student Chapter & SAE Student Chapter, Automobile Engineering Department, ADIT

MR. DUSHYANT BHATT
Powertrain Testing Engineer, Mercedes-Benz R&D INDIA

Register Now!
<https://bit.ly/35YZc7K>

Department of Automobile Engineering presents,
Webinar on

**PAINTING PROCESS IN
AUTOMOTIVE OEMs**

No Registration Fees!
Time: 14th June 2020, 6:00 pm
Target Audience: Automobile & Mechanical Engineering Students.
Organized By: ISTE Student Chapter & SAE Collegiate Club of ADIT, Automobile Engineering Department, ADIT.
E certificate will be provided to the participants

MR. ADITYA SHUKLA
Sr. Manager(Quality),Tata Motors, Sanand

Register Now!
<https://bit.ly/35YZc7K>

(A CONSTITUENT COLLEGE OF CVM UNIVERSITY)

Automobile Engineering & ISTE Student Chapter presents
Webinar on

PLM for Manufacturing & Healthcare

No Registration Fees!
Date : 25th July 2020
Time : 03:00 PM
E-Certificate Will be provided
Target Audience: Mechanical and Automobile Engineering Graduates, Diploma holders, Students, Faculty and Industry Professionals

MR. Udit Mittal
Business Analyst, Baxter

REGISTER NOW!
<https://rfd.gy/udm3wp>

A D PATEL INSTITUTE OF TECHNOLOGY
(A CONSTITUENT COLLEGE OF CVM UNIVERSITY)

**WEBINAR ON
INDUSTRIAL COMPONENT DESIGN
USING CREO PARAMETRIC**

ORGANISED BY:
AUTOMOBILE ENGINEERING DEPARTMENT,
ADIT IN ASSOCIATION WITH KHOJDIYAR
CAD CENTER (I) PVT LTD, UNDER ISTE
STUDENT CHAPTER.

DATE : 21/7/2020
TIME: 11 AM
TARGET AUDIENCE: AUTOMOBILE/
MECHANICAL ENGINEERING STUDENTS,
FACULTY, INDUSTRY PERSONS.

REGISTER NOW!
<http://shorturl.at/mfz63>

MR. RENISH CHODASARA
Technical Manager at
Khojdiyar CAD Center (I)

STUDENTS ACHIEVEMENT

- Team of “ADVITIYA” (Winner of Electric 2-wheeler Design Competition) blessed and Honored by management of Charutar Vidya Mandal.



Winner of overall and best maneuverability at electric two wheeler design competition -2019



Final year Automobile engineering students had participated in “Electric Two Wheeler Design Competition”, A national level event organized by SAE Southern section, at Satyamangalam, Erode – Tamilnadu, and won total price money of Rs:90,000/-

DETAILS OF CO-CURRICULAR ACTIVITIES



One day workshop on "Electric Vehicles: Development & Commercialization" organised under the SSIP cell on 13.02.2020.; **Name of Speaker:** Mr. Dhyeya Pandya (ADIT Alumni), Technical Officer, ABZO Motors Pvt. Ltd., Gandhinagar.



"*Shubharambhi*" of making of Electric Two-Wheeler for SAEISS-2020 design competition.

PLACEMENT DETAILS



Name of the Student: Vishesh Shah

Enrollment No: 170013102017 ; Passing year: 2020

Recruiter : Collabera Services Pvt. Ltd.



Name of the Student: Niraj Ojha

Enrollment No: 160010102020 ; Passing year: 2020

Recruiter : Chegg India Pvt. Ltd.



Name of the Student: Darshan Patel

Enrollment No: 160010102029 ; Passing year: 2020

Recruiter : Chegg India Pvt. Ltd.



Name of the Student: Deep Patel

Enrollment No: 160010102030 ; Passing year: 2020

Recruiter : Chegg India Pvt. Ltd.



Name of the Student: Jatan Bhavsar

Enrollment No: 160010102003 ; Passing year: 2020

Recruiter : Chegg India Pvt. Ltd.



Name of the Student: Ruman Ramodia

Enrollment No: 160010102003 ; Passing year: 2020

Recruiter : V.K Translines, Ranoli-Baroda

CURRENT ACTIVITIES

➤ SAEISS electric two wheeler design competition. (2020-21)

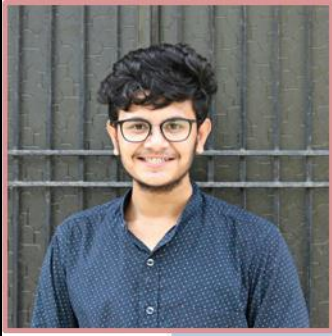
HIGHLIGHTS OF 8TH SEMESTER PROJECTS

Sr.	Project Title	Guide Name
1	Design and Development of LMD hybrid Robot	Prof. Nikunj Yagnik
2	Electric Cycle for Garbage Collection	Prof. Yagnesh Gambhava
3	Gesture Control smart Power Window	Dr. Nimit Patel
4	Test Protocol Development for Tire Sidewall Failure (IDP)	Dr. Ajith Tom James
5	Test Protocol Development for Advance two wheeler testing (IDP)	Dr. Ajith Tom James
6	Design Tool Box for 2/3 W Moulds (IDP)	Dr. Ajith Tom James
7	Design and Development of Fire Extinguisher Robot	Prof. Nikunj Yagnik
8	Improving Performance & Testing Of Fiat With 5KW Motor	Prof. Samarth Shelat
9	Linear motion Bi-cycle	Prof. Yagnesh Gambhava
10	Automated GT Handling (IDP-Industry Define Problem)	Dr. Ajith James Tom
11	Design and Analysis of Inlet manifold along with detection of air filter blockage in vehicle	Dr. R Balasubramanian
12	Leakage in rubber tube of Shaft	Dr. Nimit Patel
13	Conversion of Gasoline bike to LPG	Dr. R Balasubramanian
14	High Performance Electric Vehicle	Dr. Nimit Patel
15	Study on corrective technical measure to assist safety in automobile (IDP)	Prof. Mahesh Phogat
16	Design and Development of a novel innovative mechanism based 4 legged robot for land mine detection	Prof. Nikunj Yagnik
17	Analysis Based bumper behaviour during crash/impact using Creo Dynamics	Prof. Kuldip Patel
18	To avoid shaft bending while winding	Prof. Simit Prajapati
19	End connectors of shaft wear reduction	Prof. Samarth Shelat
20	Safety chuck run-out	Prof. Simit Prajapati
21	Rubber nipple cracks in shaft use for grip	Prof. Simit Prajapati
22	Modelling and Simulation of Hybrid Vehicles	Dr. R Balasubramanian

Failure is simply the opportunity to begin again, this time more intelligently.

Henry Ford

LIST OF TOPPERS



7th -Sem-A.Y-2019-20

- Hardik Joshi
- 160010102016
- CPI-8.45



7th -Sem-A.Y-2019-20

- Mohiuddin Memon
- 160010102019
- CPI-8.22



5th -Sem, A.Y-2019-20

- Sunny Verma
- 170010102049
- CPI-9.18



5th -Sem, A.Y-2019-20

- Purav Patel
- 170010102026
- CPI-8.64

Education is the most powerful weapon which you can use to change the world.

Nelson Mandela



3rd -Sem, A.Y-2019-20

- Aayush Mistry
- 180010102021
- CPI-8.13



3rd -Sem, A.Y-2019-20

- Maharshi Sompura
- 180010102046
- CPI-7.52



1st -Sem A.Y-2019-20

- Madhav Makwana
- 190010102008
- CPI-9.06



1st -Sem A.Y-2019-20

- Devansh Purohit
- 190010102017
- CPI-8.26

Education is the manifestation of perfection present in man Divinity is the manifestation of the religion already in man.

Swami Vivekananda

OUR DISTINGUISHED ALUMNI



Rutvija Dani

RTO
GUJARAT STATE



Dushyant Bhatt

MERCEDES BENZ
BENGALURU



Pratiksha Chauhan

M. G MOTORS,
HALOL



Archan Pujara

MARUTI SUZUKI LTD,
HARYANA



Jimit Mehta

TESLA, USA



Vrushen Pathak

GOOGLE, USA



Meet Bhatt

HERO MOTOCORP,
HALOL



Rakesh Sharma

HARLEY DAVIDSON,
DELHI



Jainam Shah

TATA, AIG



Kelkar Kshitij

MERCEDES BENZ,
BENGALURU



Hrishikesh Panchal

HERO MOTOCORP,
HALOL



Amit Tekwani

MAHINDRA &
MAHINDRA, T.N



Nayan Bhungani

L & T, VADODARA



Jignesh Maliya

RTO
GUJARAT STATE



Dharamdev Vyas

ARAI, PUNE



Darpan Shah

VOLVO EICHER,
INDORE



Lalit Gondaliya

BAJAJ AUTO,
GUJARAT



Gaurang Prajapati

TATA MOTORS,
PUNE



Shyam Patel

FORD, USA



Harsh Shah

TCS, PUNE



Purvish Bhatt

FEV MOTORS,
GERMANY



Jittal Mehta

TOYOTA MOTORS,
SURAT



Zenith Khoyani

M. G MOTORS,
HALOL



Prakash Thoria

KIRLOSKAR ENGINES,
KOHLAPUR



Ashay Sharma

FIAT CHRYSLER, USA



Kushaal Desai

MAHINDRA &
MAHINDRA, PUNE



Harsh Acharya

FORD, USA



Alisha Patel

DUPONT, USA



Arjun Thakkar

UBER, HYDERABAD



Viral Solanki

ASHOK LEYLAND,
SURAT



Kamalnayan Patel

HYUNDAI MOTORS,
GUJARAT



Umesh Rawat

MARUTI SUZUKI LTD,
MUMBAI



Ashwin Dudhat

TATA MOTORS, PUNE



Jaydeep Soni

MAHINDRA &
MAHINDRA, PUNE



Nayan Prajapati

INFOSYS, PUNE



Jay Tank

ARTO
GUJARAT STATE

ALUMNI TESTIMONIAL



Kshitij Kelkar
Mercedes Benz Research &
Development India
(Vehicle CO2 simulations)
Year of Passing: 2011

“I consider my time in college as my most valuable & important period of my life. My 4 years in college had given me a chance to sharpen my technically & soft skills with an exposure to technical & cultural fests. The events like ‘Baja, Supra/ SAE’ encourage students to work more in labs with tools and have sense of automotive engineering. The faculties were supportive in subjects & project matters.”



Dushyant Bhatt
Powertrain testing engineer
Mercedes-Benz R& D India
Passing Year: 2008

“ADIT has enriched my life and given me a platform to build myself as a great person and an Automobile engineer for the industry. The faculties have helped me to gain more fundamentals about the subject I have been learning. They encouraged and supported me for various events during study tenure. I am thankful to the entire college for providing excellent ambience, teachers, education, and challenges”

Education is not the learning of facts, but the training of the mind to think.

Albert Einstein

OUR RESPECTED VEHICLE DONORS

Sr.	Name of Donor	Vehicle Make
1	Late. Dr. C. L. Patel- (Former Chairman, CVM)	Maruti Esteem
2	Late. Dr. C. L. Patel- (Former Chairman, CVM)	Maruti Baleno
3	Mrs. Vinodini B. Patel	Opel Astra
4	Mr. Gordhanbhai V. Amin	Premier Padmini
5	M. U. Patel ITC, New Vallabh Vidya Nagar	Premier Padmini
6	Dr. Sudhir Gupte (Ex. HDD - Automobile Engineering - ADIT)	TATA Indica
7	CVM (Bhaikaka's Old vehicle)	Jeep
8	A. R. College of Pharmacy, Vallabh Vidya Nagar, CVM (Institute vehicle)	TATA Indigo-Dicor
9	Mr. Rajkumar G. Tilani	Maruti Esteem
10	Dr. Vishal N. Singh (Principal-ADIT)	Maruti Zen

Vehicles are donated to the department laboratory for the purposes such as demonstration of the vehicle model, learning of various automotive systems with their working principle, practical performance and student's project.

CONTACT US:

www.adit.ac.in

www.youtube.com/automobileenggadit

E-mail: 1. head.ae@adit.ac.in

2. automobilenewsletter@adit.ac.in

3. For Admission Inquiry:- Prof. Yagnesh Gambhva

ae.yagnesh@adit.ac.in; **Mob:** 9824384884

4. For Placement Inquiry:- Prof. Samarth Shelat

placements.ae@adit.ac.in; **Mob:** 9725735830

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