



Uka Tarsdia University
Mechanical &
Automobile Engineering
Department, CGPIT

Field Visit / Industrial Visit
BPR Sales & Service, Bardoli

Date: 7th January, 2025

Venue: BPR Sales & Service, Bardoli (Force Motors, India's Authorized Service Centre)

Time: 12:45 pm to 2:45 pm

Total No. of Participants: 20

Event Coordinator: Dr. Hiren Shah, Dr. Paresh Gujarati

Program objective: To understand the Vehicle HVAC system.

Program outline:

- Introduction to Vehicle HVAC System in Ambulances: Components and Functions.
- Hands-on Demonstration: Understanding Installation, Operation, and Maintenance.

Program outcomes:

- Enhanced Understanding: Participants grasp the functionality and importance of HVAC systems in ambulances for patient care.
- Practical Knowledge: Participants gain insights into troubleshooting common issues and maintaining optimal performance.
- Safety Awareness: Participants learn about safety protocols and regulations concerning vehicle HVAC systems, ensuring efficient and safe operation in emergency situations

Schedule of Event

Time	Activity
12:45 pm	Started from College
01:05 pm	Reached to BPR Sales & Service,
02:20 pm	Started return Journey
02:45 pm	Reached UTU, Maliba Campus

List of Students

Name of Participant	Enrolment No	Stream	Name of Program
Meet Jatin Roopawala	202103103510123	B.Tech	Automobile Engineering
Zubin Keyur Shah	202103103510339	B.Tech	Automobile Engineering
Arpan Debdas Nandi	202103103510340	B.Tech	Automobile Engineering
Jiten Chetan Kapadi	202203103520069	B.Tech	Automobile Engineering
Bhumin Nileshbhai Patel	202203103520095	B.Tech	Automobile Engineering
Dhruv Umeshkumar Gandhi	202203103520097	B.Tech	Automobile Engineering
Vrushank Maheshbhai	202203103520161	B.Tech	Automobile Engineering
Dharmeshkumar Shankarbhai	202203103520162	B.Tech	Automobile Engineering
Divyangbhai Chhaganbhai	202203103520164	B.Tech	Automobile Engineering
Aryan Pravinbhai Patel	202103103510144	B.Tech	Mechanical Engineering
Shashank Kantibhai Rohit	202103103510261	B.Tech	Mechanical Engineering
Cherag Nilesh Mistry	202203103520006	B.Tech	Mechanical Engineering
Meet Umeshbhai Tank	202203103520007	B.Tech	Mechanical Engineering
Tiger Bhanupratap Dhananjay	202203103520013	B.Tech	Mechanical Engineering
Parth Gautamkumar Panchal	202203103520042	B.Tech	Mechanical Engineering
Priyank Sanjaybhai Ranoliya	202203103520050	B.Tech	Mechanical Engineering
L S Ram Anil P	202203103520067	B.Tech	Mechanical Engineering
Khush Jayesh Wadia	202203103520119	B.Tech	Mechanical Engineering
Brijesh Prakashbhai Patel	202203103520138	B.Tech	Mechanical Engineering
Mihir Jayeshkumar Modi	202203103520143	B.Tech	Mechanical Engineering

Event Introduction:

The field visit conducted on January 07, 2025 by BPR Sales and Service, proprietor Mr Jaykumar Prabhakaran, aimed to provide final year B.Tech Mechanical & B.Tech Automobile engineering students with insights into the AC system of vehicles, particularly focusing on the ambulance model Tempo Traveller. This event held great significance as it bridged theoretical knowledge with practical application, offering students real-world exposure to vehicle HVAC systems, crucial for their academic and professional development. They are using Subros Company's components for HVAC work. Subros is India's largest and only integrated manufacturer of automotive air conditioning systems. They cater to a variety of segments, including passenger vehicles, buses, trucks, refrigeration transport, off-roaders, railways, and

residential air conditioners.

Key Highlights:

- **In-depth Demonstration:** Students were given a comprehensive overview of the AC system installed in the Tempo Traveller ambulance, highlighting its components, functioning, and importance in ensuring patient comfort and safety during transit.
- **Practical Insights:** Hands-on sessions enabled students to explore the installation, operation, and maintenance procedures of the AC system under the guidance of experienced technicians.
- **Industry Relevance:** Discussions revolved around the significance of vehicle HVAC systems in catering to diverse clientele, including government agencies, NGOs, MNCs, and multi-specialty hospitals in the South Gujarat region.

Overview of Schedule:

- Introduction to BPR Sales and Service and its association with Force Company's Tempo Traveller ambulance unit.
- Discussion on the design and functionality of vehicle HVAC systems, with a focus on the ambulance model.
- Hands-on demonstration and interactive sessions.
- Q&A session to address student queries and foster a deeper understanding.

Notable Discussions:

- **Importance of HVAC Systems:** Emphasis was placed on the critical role of AC systems in ensuring patient comfort, maintaining proper ventilation, and preventing the spread of infections within ambulance compartments.
- **Technical Challenges:** Discussions centered around common issues faced in vehicle HVAC systems and strategies for troubleshooting and preventive maintenance.
- **Industry Trends:** Insights were shared on emerging technologies and innovations in vehicle AC systems, aligning with the evolving needs of the healthcare and transportation sectors.

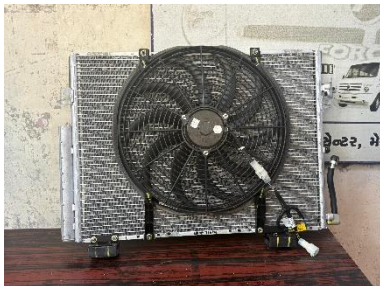
Overall Success and Impact:

The event proved highly successful in achieving its objectives of familiarizing students with vehicle HVAC systems, particularly in ambulance settings. Students gained practical insights, industry-relevant knowledge, and a deeper appreciation for the complexities involved in ensuring optimal AC performance in critical healthcare scenarios. The event's impact extended beyond the classroom, empowering students with valuable skills and perspectives essential for their future careers in the automotive industry.

Photo Gallery:



Group Photo



Condensor with Fan



Evaporator & Condensor



Engine with Compressor Connection



Compressor



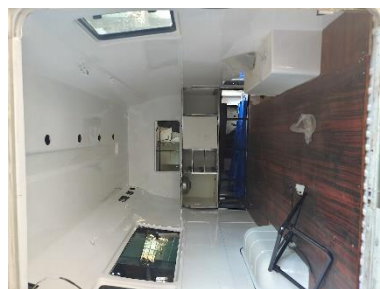
Solenoid



Inside of Ambulance



Refrigerant



Interior of Ambulance

Concluding Remarks

- The objectivity of the program as per the NAAC criteria
- Mention the NAAC criteria and its relevance.

Industrial visits primarily fall under the following criteria of NAAC:

- Criterion 4: Infrastructure and Learning Resources
This criterion assesses the adequacy and utilization of infrastructure and learning resources, including external resources such as industrial visits, to enhance the quality of education and student learning outcomes.
- Criterion 5: Student Support and Progression
This criterion evaluates the effectiveness of student support services, including career guidance and counseling, in facilitating student progression and ensuring their holistic development. Industrial visits play a crucial role in providing students with exposure to industry practices and potential career pathways.

Media Coverage

- Instagram Link: <https://www.instagram.com/p/DEkBhbqjw8/?igsh=ajF2dW4wNGoxNXBr>
- Facebook Link: <https://www.facebook.com/photo/?fbid=981601037322529&set=a.648281590654477>
- News paper Article: Sandesh (Surat - Tapi Edition) Date: 9th January 2025, Page No. 03



Report prepared by:
Dr. Hiren A. Shah
Date: 10th January 2025

Sign of the HOD
Prof. Darshan A. Kapadia

Sign of Director
Prof. B. M. Vadher

Concluding Remarks

- The objectivity of the program as per the NAAC criteria
- Mention the NAAC criteria and its relevance.

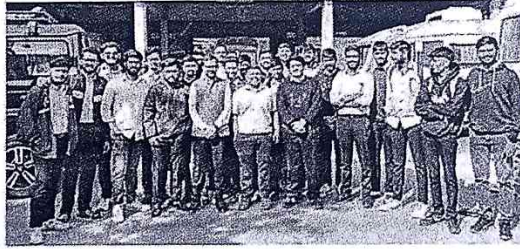
Industrial visits primarily fall under the following criteria of NAAC:

- Criterion 4: Infrastructure and Learning Resources
This criterion assesses the adequacy and utilization of infrastructure and learning resources, including external resources such as industrial visits, to enhance the quality of education and student learning outcomes.
- Criterion 5: Student Support and Progression
This criterion evaluates the effectiveness of student support services, including career guidance and counseling, in facilitating student progression and ensuring their holistic development. Industrial visits play a crucial role in providing students with exposure to industry practices and potential career pathways.

Media Coverage

- Instagram Link: <https://www.instagram.com/p/DEkBhbqiaw8/?igsh=ajF2dW4wNGoxNXBr>
- Facebook Link: <https://www.facebook.com/photo/?fbid=981601037322529&set=a.648281590654477>
- News paper Article: Sandesh (Surat - Tapi Edition) Date: 9th January 2025, Page No. 03

માલીબા સંકુલના વિદ્યાર્થીઓએ એમ્બ્યુલન્સ મેન્યુફેક્ચરિંગ વિશે માહિતી મેળવી



બારડોલી : બારડોલી સ્થિત ઊંચા તરસાડીયા યુનિ.માં આવેલી સી.જી.પટેલ ઈન્સ્ટિટ્યૂટ ઓફ એન્જિનિયરિંગ એન્ડ ટેકનોલોજીના ૨૦ જેટલા મિકેનિકલ અને ઓટોમોબાઈલ એન્જિનિયરિંગના વિદ્યાર્થીઓએ બારડોલીમાં એમ્બ્યુલન્સ મેન્યુફેક્ચરિંગ સર્વિસ સ્ટેશનની મુલાકાત લઈ ઉત્પાદન અને વહીકલ એર કન્ડિશનીંગ સિસ્ટમ વિશે પણ માહિતી મેળવી હતી. આ વિઝીટ પ્રોફેસર ડો.હિરેન શાહ અને પ્રોફેસર ડો.પરેશ ગુજરાતીના માર્ગદર્શન હેઠળ કરવામાં આવી હતી.

H. A. Shah

Report prepared by:
Dr. Hiren A. Shah
Date: 10th January 2025

A. W. Kapadia

Sign of the HOD
Prof. Darshan A. Kapadia

B. M. Vadher

Sign of Director
Prof. B. M. Vadher

Date: 06th January 2025

To,
The Director,
Chhotubhai Gopalbhai Patel Institute of Technology (CGPIT),
Uka Tarsadia University,
Bardoli, Gujarat.

Subject: Request for Approval of Industrial Visit to BPR Sales and Service

Dear Sir,

We are writing to inform you that we have received verbal permission from **BPR Sales and Service**, Bardoli, to conduct an industrial visit for our final-year Mechanical and Automobile Engineering students. The visit is scheduled for **07th January 2025**, with the timing from **12:00 noon to 3:00 pm**

The purpose of the visit is to provide students with practical insights into the **HVAC domain** and observe the conversion process of Force company vehicles into ambulances. This learning opportunity aligns with our curriculum and enhances students' understanding of real-world applications.

The visit will be supervised by **Dr. Hiren A. Shah**, and **Dr. Paresh Gujarati**, ensuring proper guidance and discipline throughout.

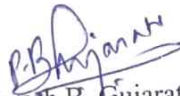
We kindly request your formal approval to proceed with this visit. Your support in facilitating such educational experiences is greatly appreciated.

Thank you for your attention to this matter.

Sincerely,



Dr. Hiren A. Shah
Assistant Professor, Mechanical/Automobile Engineering Department, CGPIT



Dr. Paresh B. Gujarati
Assistant Professor, Mechanical/Automobile Engineering Department, CGPIT



Prof. Darshan A. Kapadia
Head, Mechanical/Automobile Engineering Department, CGPIT



Prof. B. M. Vadher
Director, CGPIT

Mechanical & Automobile Engineering, CGPIT
Industrial Visit : BPR Sales & Service, Bardoli

Date: 7th January, 2025

Attendance Sheet

Sr. No.	Enrollment No	Student Name	Branch	Present / Absent
1	202103103510123	MEET JATIN Roopawala	Automobile Engineering	Met
2	202103103510339	Zubin Keyur Shah	Automobile Engineering	Shah
3	202103103510340	Arpan Debdas Nandi	Automobile Engineering	Arpan
4	202103103510413	MOHAMMADRAZIN MAKSUDAHMEDKHAN PATHAN	Automobile Engineering	AB
5	202203103520069	JITEN CHETAN KAPADI	Automobile Engineering	Jiten
6	202203103520095	BHUMIN NILESHBHAI PATEL	Automobile Engineering	Bhumin
7	202203103520097	DHRUV UMESHKUMAR GANDHI	Automobile Engineering	Dhruv
8	202203103520161	VRUSHANK MAHESHBHAI CHAUDHARI	Automobile Engineering	VRUSHANK
9	202203103520162	Dharmeshkumar Shankarbhair Gamit	Automobile Engineering	D. S. OF AB
10	202203103520164	DIVYANGBHAI CHHAGANBHAI CHAUDHARI	Automobile Engineering	D. S. OF AB
11	202103103510144	Aryan Pravinbhai Patel	Mechanical Engineering	A.P. Patel
12	202103103510261	Shashank Kantibhai Rohit	Mechanical Engineering	S.K. Rohit
13	202203103520006	CHERAG NILESH MISTRY	Mechanical Engineering	C. N. Mistry
14	202203103520007	MEET UMESHBHAI TANK	Mechanical Engineering	Meet
15	202203103520013	TIGER BHANUPRATAP DHANANJAY RAI	Mechanical Engineering	Tiger
16	202203103520020	VIMAL KUMAR GANDHI NISHITH	Mechanical Engineering	AB
17	202203103520026	Viraj Amar Desai	Mechanical Engineering	AB
18	202203103520042	Parth Gautamkumar Panchal	Mechanical Engineering	Parth
19	202203103520050	PRIYANK SANJAYBHAI RANOLIYA	Mechanical Engineering	Priyank
20	202203103520063	KUNAL RAJESH SALUNKE	Mechanical Engineering	Khe Mahakumbh
21	202203103520067	LS RAM ANIL P	Mechanical Engineering	P. Anil
22	202203103520075	LALIT BHAGVATILAL PUROHIT	Mechanical Engineering	AB
23	202203103520098	Brijesh A Bhatia	Mechanical Engineering	Medical
24	202203103520119	KHUSH JAYESH WADIA	Mechanical Engineering	Khushi
25	202203103520138	BRIJESH PRAKASHBHAI PATEL	Mechanical Engineering	Brijesh
26	202203103520143	MIHIR JAYESHKUMAR MODI	Mechanical Engineering	Mihir

Shah
7/1/2025

Shah
07/01/25



Modi