



**SARVAJANIK COLLEGE
OF ENGINEERING &
TECHNOLOGY**



Industrial visit Report

Vikram Sarabhai Space Exhibition

(VSSE) Center

(22-04-2025)

Electronics and Communication Engineering Department



VIKRAM SARABHAI SPACE CENTRE
Indian Space Research Organisation, Department of Space
Government of India

विक्रम साराभाई अंतरिक्ष केंद्र
भारतीय अंतरिक्ष अनुसंधान संगठन, अंतरिक्ष विभाग
भारत सरकार



Prepared and Compiled by

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Assistant professor

[E&C Engineering Department]

VISIT Details

Visit to: Vikram Sarabhai Space Exhibition (VSSE) Center

Location: ISRO Campus, Ahmedabad, Gujarat

Date of Visit: 22/4/2025

Department: Electronics and Communication Engineering Department]

Institution: Sarvajanik College of Engineering and Technology

Coordinators: Dr. Ketki C. Pathak , Prof. Pritesh Saxena , Prof Chhaya Suratwala, Prof. Chintan Panchal

Number of Students: B.Tech. 3rd Year [44 students] +B.Tech. 4th Year [42 students]

Industry Details

Company name : Vikram Sarabhai Space Exhibition (VSSE) Center

Address : ISRO Campus, Ahmedabad, Gujarat

Homepage : <https://www.vssc.gov.in/>

“Dream is not the thing you see in sleep but it’s that thing that doesn't let you sleep.”— A.P.J. Abdul Kalam “ISRO creates history, launches 104 satellites in one go.”

The Vikram Sarabhai Space Exhibition is a part of ISRO’s outreach program aimed at inspiring young minds. Named after Dr. Vikram Sarabhai, the father of India’s space program, the exhibition showcases the legacy, achievements, and future missions of ISRO through interactive displays, working models, static exhibits, and audio-visual content.

We the Electronics and Communication Engineering Department feels proud to witness to visit the ISRO-VSSE. With an endless support of our principal, Dr. Hiren Patel , and our HOD, Dr. Chirag Paunwala and class mentor of 4th year Dr. Ketki C. Pathak , Class Mentor of 3rd Year Prof. Pritesh Saxena , Prof. Chhaya Suratwala and Prof. Chintan Panchal of E&C Engineering Department has organized an INDUSTRIAL Visit to ISRO-Vikram Sarabhai Space Exhibition (VSSE) Space Applications Centre, Ahmadabad on 22nd April 2025.

This visit is related to the content beyond syllabus for the following subjects

- 1. Antenna and Microwave engineering**
- 2. Non Terrestrial Communication (Satellite communication related)**
- 3. Wireless Communication**

Highlights of Industry Visits:-

1. Real 3-D video shoot by Astronaut in space.
2. Simulation of GSLV
3. Brief discussion on asking more questions during visit by H. B. Pandya (In charge-ISROVSSE-Ahmedabad)

ISRO, India's premier space agency, is renowned globally for its groundbreaking achievements in space technology and exploration. This visit offered students a unique opportunity to delve into the world of space science and technology, providing them with a firsthand understanding of the practical applications of their studies and the innovative advancements in the field of space exploration.

The visit was started at 7.00 AM from Surat to Ahmedabad by Bus. Our 3rd year and 4th year students were very much excited to board the train for visiting ISRO-Ahmedabad on 22nd April 2025(Tuesday). They were eager to get know how satellites & launchers works, what are the opportunities for computer students, what kind of efforts one has to put to become the part of ISRO.

We have visited Dr. Vikram Sarabhai Science exhibition, ISRO. The visit started with 3-D documentary shoot by Astronauts' in space, followed by brief session on Mangalyan & Chandrayan, simulation on GSLV (Geosynchronous Satellite Launch Vehicle). The volunteers have given insight of ASLV-which was the first launcher made under the supervision of Dr. A. P. J. Abdul Kalam. Students came to know that if space researcher sent by NASA then they have been called **Astronaut** but if ISRO will send some researcher at space they have been known as **Vyomnaut**.

Students were fascinated by checking the details of PSLV- (Polar Satellite Launch Vehicle). By the time we were mesmerized with GSLV & PSLV, there were many more surprise elements were waiting for us. The team ISRO explained & discussed the real time Satellite with Demo. The explanation started with basic hardware, what are types of antennas, what are payloads, how ingestion chamber works, why fuel is required in the chamber, why batteries were used, what are solar panels. The students were delighted to see prototype of solar system with all the planetary information.

Summary

The visit began with a brief orientation session by ISRO staff explaining the objectives of VSSE and ISRO's contributions to national development.

Exhibition Hall Tour:

- **Satellite Models:** We observed models of Indian satellites like Aryabhata, INSAT, GSAT, and IRS.
- **Launch Vehicles:** Display models of PSLV, GSLV, and GSLV Mk III were showcased along with mission achievements.
- **Remote Sensing and Communication:** Demonstrations on how satellite data aids in agriculture, weather forecasting, disaster management, and communication.
- **Mars and Moon Missions:** Models and documentaries on Chandrayaan and Mangalyaan provided insights into deep space exploration.
- **3D Space Theatre:** A short 3D film was screened, depicting space missions and life of astronauts.
- **Interaction with Scientists:** Students had the opportunity to interact with ISRO scientists, who answered queries related to space missions, payloads, rocket science, and career opportunities.

The visit to the Vikram Sarabhai Space Exhibition Centre offers several key benefits for the students as outcome based learning :

Theory in Action: Witness ISRO's applications in action, reinforcing classroom learning with real-world examples.

Career Inspiration: Interact with space scientists and engineers, gaining insights into careers in space technology.

Tech Exposure: Explore cutting-edge space technologies and innovations, igniting interest in aerospace engineering.

Problem-Solving Skills: Learn how ISRO addresses complex challenges in space exploration and satellite technology.

Future-Ready Skills: Gain an understanding of ISRO's focus on research, development, and innovation in space science.

Informed Career Choices: Experience the world of space technology firsthand, aiding in informed career decision-making

This industrial visit to the Vikram Sarabhai Space Exhibition Centre aims to extend learning beyond the classroom. Students will have the opportunity to observe comprehensive applications of space technology, solidifying their theoretical knowledge. By networking with ISRO professionals, they will gain valuable insights into the industry and explore potential career paths in space science and engineering. This trip is not only a gateway to future careers but also an inspiration for innovation.

By exploring ISRO's technical advancements, students may develop a passion for contributing to the field of space exploration. Ultimately, this visit equips students with the knowledge and connections necessary to excel in the ever-evolving world of space technology.

The visit was ended with a group photo with team member of ISRO. The students were motivated as ISRO has opened the door for Computer students & making them understand how they can be part of such a proud organization.

Few glimpses of visit



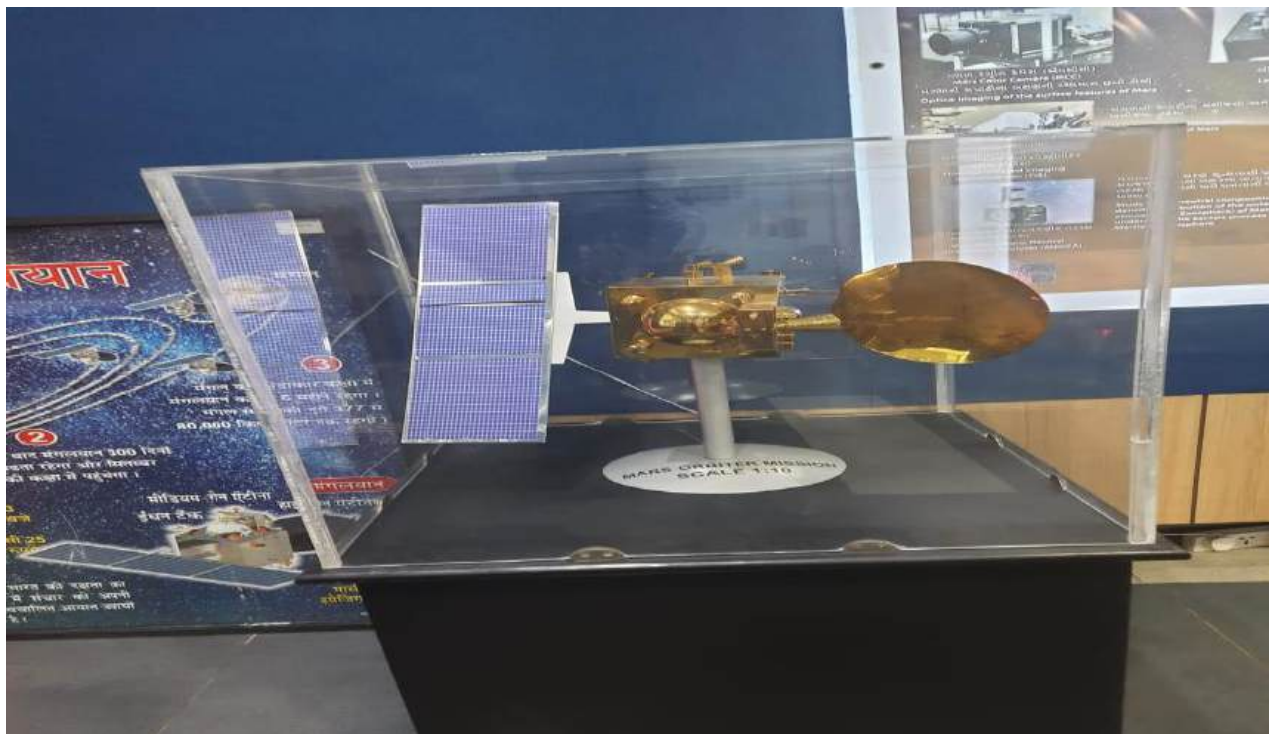




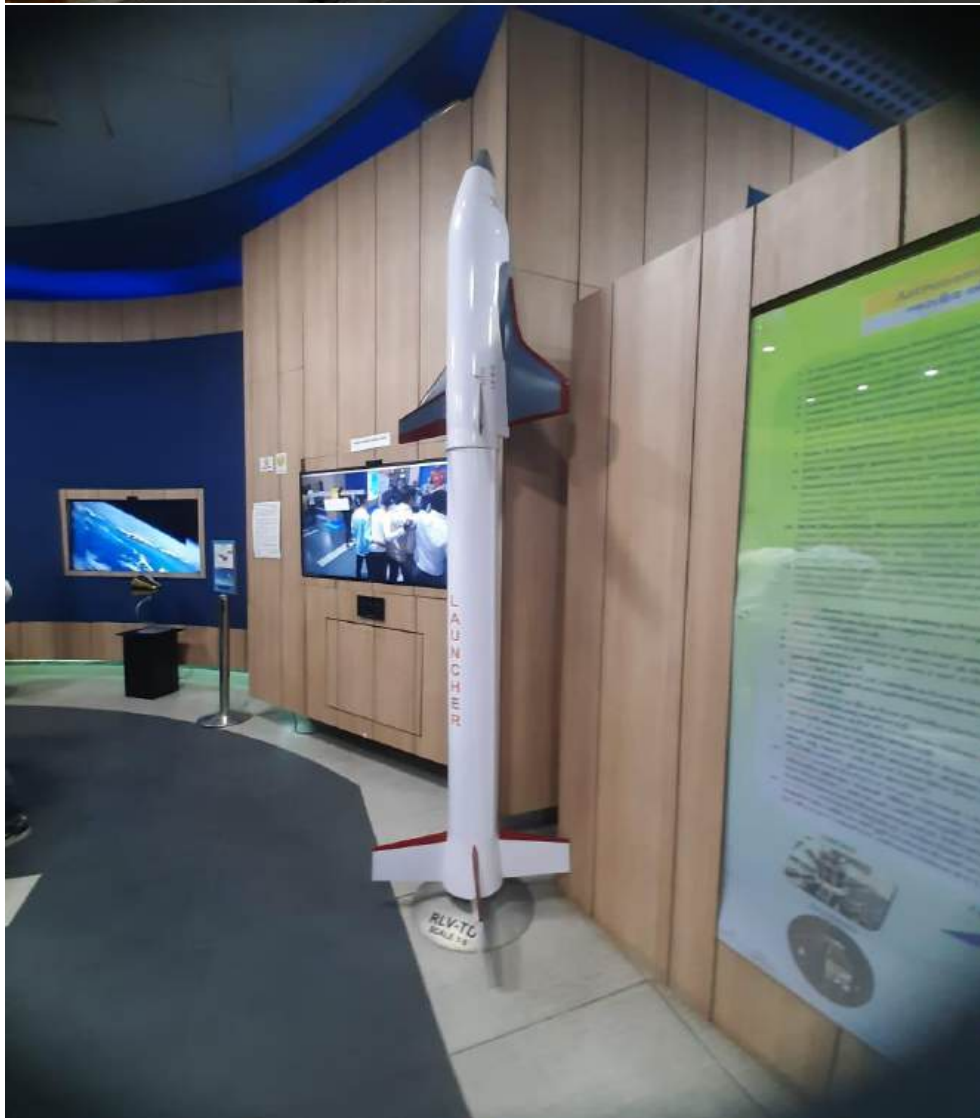












STUDENT DETAILS

VSSE Visit(Btech 3rd EC)(Date:22/4/2024)

Sr. No.	Enrolment NO	Student Name	Contact No.	scet mail id	Sign 1	Sig
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List of Students VSSE Gandhinagar				
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13	Sayam Jain	ET21BTEC024	sayamjain.ec21@scet.ac.in	9427821780
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20	Niyati Majumdar	ET21BTEC034	niyatimajumdar.ec21	
21	Alok mevawala	ET21BTEC037	alokmevawala.ec21@scet.ac.in	6352541199
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23	Vatsa Noticewala	ET21BTEC040	vatsanoticewala.ec21@scet.ac.in	9824945485
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List of Students VSSE Gandhinagar				
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Department	Electronics and Communication Engineering Department			
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