#### DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

## **Industrial Visit Report - U R Rao Satellite Centre, Bangalore**

**Industry Visited:** U R Rao Satellite Centre, Bangalore.

**Date:** 27<sup>th</sup> June 2023

Total 60 students of SEM IV

**Faculty Accompanied:** 

1.) Prof. Lakshmikantha G C

2.) Prof. Hemavati

#### **Introduction:**

The industrial visit to U R Rao Satellite Centre (URSC) in Bangalore was conducted on 27th June 2023 from 11.00 am to 12.30 pm for the students of the 4th semester from Artificial Intelligence and Machine Learning, Global Academy of Technology, Bangalore. The objective of the visit was to provide students with practical exposure to the field of satellite technology, space research, and the operations carried out at URSC.

# **Company Overview:**

U R Rao Satellite Centre, a part of the Indian Space Research Organisation (ISRO), is a premier research and development center dedicated to the design, development, and testing of satellites for various applications. It plays a significant role in the Indian space program, contributing to national and international space missions.

### Aim of the industrial visit:

- 1. **To Gain Practical Exposure:** To provide students with practical exposure to the field of satellite technology and space research.
- 2. **To Understand Industrial Processes:** To familiarize students with the various stages involved in satellite design, development, and testing.
- 3. **To Explore Career Opportunities:** To expose students to potential career opportunities in the field of satellite technology and space research.
- 4. **To Observe Technology and Innovation:** To showcase the advanced technologies and innovative practices employed at URSC.

- 5. **To Foster Industry-Academia Collaboration:** To strengthen the relationship between the academic institution and URSC.
- 6. **To Develop Professional Networking:** To facilitate networking opportunities for students with professionals from the satellite industry.
- 7. **To Enhance Soft Skills:** To enhance their communication, teamwork, and observational skills.
- 8. **To Inspire and Motivate:** To inspire and motivate students by showcasing the achievements and advancements made by URSC in the field of satellite technology.

# **Visit Highlights:**

The industrial visit to U R Rao Satellite Centre offered the students an in-depth understanding of satellite technology and its applications. The visit encompassed the following key highlights:

- 1. **Introduction to URSC:** The visit started with an introduction to URSC, including its history, mission, and the significance of its contributions to the space industry. The students gained insights into the various departments and their roles within the organization.
- 2. **Satellite Design and Development:** The students were given a comprehensive overview of the satellite design and development process. They learned about the different stages involved, such as conceptualization, payload integration, thermal testing, and launch preparation.
- 3. **Satellite Testing Facilities:** The visit included a tour of the satellite testing facilities at URSC. The students witnessed the sophisticated equipment used for environmental testing, vibration testing, and electromagnetic compatibility testing. They were introduced to the rigorous quality assurance processes implemented to ensure the reliability and performance of satellites.
- 4. **Interaction with Scientists and Engineers:** The students had the opportunity to interact with scientists and engineers working at URSC. They engaged in insightful discussions, clarifying their queries about satellite technology, career opportunities in the field, and the challenges faced in satellite development.
- 5. **Exhibition and Models:** URSC showcased an exhibition featuring models of various satellites, informative displays, and multimedia presentations. The students had a chance to explore the exhibits, gaining a deeper understanding of the applications of satellites in communication, remote sensing, weather forecasting, and scientific research.

## **Outcome of the industrial visit:**

- 1. The visit to U R Rao Satellite Centre resulted in an enhanced understanding of satellite technology and space research among the students.
- 2. Students experienced real-world applications of satellite technology during the visit.

- 3. The visit provided students with insights into industry practices followed at U R Rao Satellite Centre.
- 4. The visit exposed students to potential career paths in the field of satellite technology and space research.
- 5. The visit facilitated networking opportunities for students. Interacting with professionals from U R Rao Satellite Centre allowed them to establish connections in the industry.
- 6. The visit highlighted the importance of research and development in the field of satellite technology.

#### **Conclusion:**

The industrial visit to **U R Rao Satellite Centre** was an enriching experience for the students. It provided them with a firsthand glimpse into the world of satellite technology and space research. Witnessing the cutting-edge facilities and interacting with professionals from the field broadened their knowledge and sparked their interest in the space industry. This visit served as a bridge between theoretical learning and practical applications, inspiring the students to explore future career opportunities in the field of satellite technology.

# **Acknowledgments:**

We extend our sincere gratitude to **U R Rao Satellite Centre** for hosting our visit and providing us with an invaluable learning experience.

We would like to express our appreciation to the scientists, engineers, and staff members who guided us throughout the visit, sharing their knowledge and expertise. Their efforts made this industrial visit a memorable and insightful experience for all the students.

We express our heartfelt thanks to the **Management of Global Academy of Technology** for their constant support and encouragement. Their vision and commitment to providing quality education have enabled us to undertake such industry-oriented activities, enhancing our practical knowledge and enriching our learning experience.

Furthermore, We would like to thank our esteemed **Principal** for approving and supporting this industrial visit. Their encouragement and guidance have always been instrumental in organizing such educational initiatives for the students.

Last but not least, We would also like to extend our gratitude to the **Transport Department** for arranging transportation for the visit. Their logistical support ensured a smooth and comfortable journey for all the participants.

# Glimpse of Industrial Visit 2023:





