

Department of Computer Science

Report on Industrial Visit to ISRO

Title: Industrial Visit

Date: 20th June 2024

Venue: ISRO, Old Madras Road

Participants: Final Year BCA students

No of Students: 60

Event coordinator: Mr. Basavaraj C M, Ms. Shilpa Nayak

Objective of Industrial Visit: To give exposure to computer student about networking domain, which they can explore to cherish their professional life.

We are thankful to Shri M. Sankaran, Group Director, Programme, Planning & Evaluation Group and the outreach team of ISRO Satellite Centre for giving opportunity to our students for visiting their esteemed campus. We extend our gratitude to Management, Faculty of M S Ramaiah College of Arts, Science and Commerce, Bangalore for supporting us in conducting such learning activities.

On 20th June, 2024, Thursday, final year students along with the faculty left the MSRCASC campus by bus at 8:30 am. It reached ISAC campus on Old Airport Road at around 9:30 pm. After finishing reception formalities, everyone was given a pass and entered the ISAC exhibition hall. Mr. Santhosh of ISAC received us and guided us through the exhibition. Initially, there were different models of the rockets. Older rockets were displayed along with the modern PSLV and GSLV.

- Students were introduced to different types of rockets & satellites developed till now at ISRO and their purpose by Mr. Santhosh. Then we were informed about different centres of ISRO all over India & their purpose.
- Mr. Santhosh explained the various features of the rockets. Next, there were the models of satellites including the oldest Apple satellites and the later satellites with solar panels, solar

sail and minor rockets present on the satellites for adjusting their positions in space. The reason for gold color coating on the satellites for handling extremes of temperature was explained. Two types of satellites were described: Indian Remote Sensing Satellites and Communication Satellites. Remote sensing satellites are useful in activities like fishing (identifying places in the sea where fish can be found) and warnings about cyclones.

- Then, we were shown the different electronic components used in satellites. The components need to be very sturdy. Currently, they are therefore imported and very expensive. The use of aluminium honey comb material for body parts was demonstrated. These parts are light and yet very strong.
- Next, we witnessed a “clean room” where satellite is assembled. A satellite in space faces extremes of temperature such as -120 degrees to +120 degrees Celsius. We were taken to a room where there is a chamber for testing this. The chamber gets liquid nitrogen for testing against low temperature and similarly testing hot temperature. Only after thorough testing, satellite is taken by road to the launching pad at Sriharikota.
- There was a video session which presented ISAC activities. Mr. Srinivas took up answering many questions from students regarding ISRO, ISRO activities and space mission related topics. He explained the various job requirements at ISAC and the minimum marks criteria for selection. He also mentioned about the ISAC campus which students can join after 12th standard.
- Regarding research, he mentioned that ISRO and Nuclear Energy come directly under PMO. They do not undertake research partnerships with universities/colleges. However, they are willing to help and encourage universities to build their own satellites which ISRO can launch. The cost of a launch may be about Rupees 4 to 5 crores.
- After returning the passes, we boarded the bus at 1:00 pm. The bus reached MSRCASC campus at around 2:00 pm. No photographs were taken as photography was strictly not allowed at ISAC.



ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು

M S Ramaiah College of Arts, Science and Commerce

Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University,

Approved by Government of Karnataka, Approved by AICTE, New Delhi,

Recognized by UGC under 2f & 12B of UGC act 1956



1st, 1st Cross Rd, M S R Nagar, Mathikere, Bengaluru, Karnataka 560054, India

Latitude
13.03225036°

Longitude
77.56686596°

Local 07:46:58 AM
GMT 02:16:58 AM

Altitude 923 meters
Thursday, 20.06.2024





ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು
M S Ramaiah College of Arts, Science and Commerce
Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University,
Approved by Government of Karnataka, Approved by AICTE, New Delhi,
Recognized by UGC under 2f & 12B of UGC act 1956

