

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, BENGALURU-56 (An Autonomous Institution, Affiliated to VTU, Approved by AICTE, Accredited by NAAC)

Master of Computer Applications

A REPORT ON INDUSTRIAL VISIT

Place of visit : UR Rao Satellite Center & HAL Heritage Centre and Aero Space Museum

Address : Next to NAL, HAL airport road, Bengaluru - 560 017

Date of visit : 23rd Sep, 2022

Objective:

- The Industrial Visit was a great benefit for the students to directly understand about the various concepts of satellite and space missions developed by ISRO.
- > To provide the students with an insight to the internal working of an organization,
- To provide the students about the various technological opportunities available to them from the industry perspective.
- > To make students understand, job / internship opportunities at ISRO.

About Industrial Visit:

I year MCA students accompanied by Faculty & staff of MCA department of Dr. Ambedkar Institute of Technology have left the college campus at 9.00 a.m and could reach ISRO campus by 11.00 am as schedule allotted by ISRO. All students and staff in charge were directed to reach reception of ISRO to verify the students ID cards and were issued pass, hence permitted to enter the campus.



First, we went to the first floor where we all were given introduction to the ISRO center, then one of the 2 former scientists of ISRO gave us information on Remote sensing satellites, the working of it, its uses. What is navigation in channel, how satellite is communicated with earth. The other scientist gave us information on geostationary satellites and navigational satellites. Geostationary satellites are used for communication and are situated at 35,900 km above surface of the earth.

The students were then taken to the audio-visual room where they saw documentaries on the subject of what activities are taken by ISRO and what are the various task and functions of ISRO and demo videos of Mangalyaan and Chandrayaan were also shown.

Students were made to have a look of live design and development of satellites and the upcoming projects at ISRO. It was of approx. 15 to 20 minutes where we saw about the different space stations and some of its missions. Then we went to the different sections, where we saw all the models of satellites launched by ISRO. Then there was a real size satellite model where we were given live explanation of each of the parts of satellite in detail.

Session of Experts (Scientist):

It was memorable moment to attend an important lecture of scientist about navigation. It was very interesting session. They explained about communication of Satellite, channelization and its working. They also explained how broadcasting is done with satellite.



The session ended with a hearty thanks to ISRO management and scientists who have guided us on satellite technology and upcoming projects. Students got their doubts cleared regarding the topic discussed by the technical officer and suggested to complete the MCA program with high merit which helps them to get employment to ISRO or to any of the corporate companies.

Outcome:

- Understood valuable information about different aspect of space application center such as satellite technology, communication technology, rocket science.
- Learnt about information on astronauts, application of space engine, launching pads, space research programs etc.
- > They understood about various upcoming projects to be progressed at ISRO.

Again, around 2.00 pm we visited HAL Heritage Centre and Aero Space Museum, Bengaluru and showcases the growth of the Indian aviation industry and HAL for six decades. All were directed to audio-visual room showing the history and growth of Hindustan Aeronautics Limited that is synonymous with the growth of Aeronautical industry in India for more than 79 years till the latest programs includes Jaguar DARIN-III upgrade, Mirage upgrade and Hawk. Later we are guided to visit 2 halls that show cases the flight models and photographs from first design till the current model designed.

Hall 1: Photographs showcasing growth of aviation from 1940 onwards.

Hall 2: Showcases various functions of an aircraft engine. Cross section of various aircraft engines can be seen here.

Outdoor displays: MIG-21, Kiran, AJeet, Lakshya and other important aircrafts are on display



Visit was concluded after we have reached back to college campus by 4.30 p. m, filled with fun & memories.

Faculty Coordinator: Mrs. Shobha Rani. B. R, Associate Professor, Dept. of MCA

Accompanied by Dr. Bharathi., Professor, Mr. Srinivas & Ms. Tulasi, supporting staff, Dept. of MCA, Dr. AIT.