# REPORT
# ON
# INDUSTRIAL VISIT

# NATIONAL REMOTE SENSING CENTRE
# (ISRO, HYDERABAD)

Government of India
National Remote Sensing Centre
Indian Space Research Organisation
ISO 9001:2015

Organized by

## DEPARTMENT OF INFORMATION TECHNOLOGY

School of Computer, Information and Mathematical Sciences

B.S. Abdur Rahman ™
Crescent
Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956

**APRIL 2024**

On April 17 2024, 53 students from II year, B. Tech IT (Bachelor of Information Technology) and 5 students from M. Tech IT (Master of Information Technology) along with two faculty members – Dr. Mohammed Wajid Khan and Ms. Sonya – had the privilege of embarking on an educational and insightful industrial visit to NRSC ISRO ,Hyderabad. It was a wonderful opportunity to explore NRSC in Hyderabad managing satellite data acquisition and processing, with a reception station in Shadnagar.

**ABOUT NRSC ISRO:**

National Remote Sensing Centre (NRSC) is one of the primary centres of Indian Space Research Organisation (ISRO), Department of Space (DOS). NRSC has the mandate for establishment of ground stations for receiving satellite data, generation of data products, dissemination to the users, and development of techniques for remote sensing applications including disaster management support, geospatial services for good governance and capacity building for professionals, faculty and students.

**Objectives of Visit for Students:**

- Understand the role and evolution of the National Remote Sensing Centre (NRSC) within ISRO, focusing on its contributions to remote sensing technology and its relevance to IT fields.
- Explore diverse applications of remote sensing technology in IT sectors such as data analytics, GIS, precision agriculture, urban planning, disaster management, and environmental monitoring.
- Gain insights into GSLV rocket technology from an IT perspective, including aspects like telemetry, data processing, and IT integration in mission planning and satellite tracking.
- Experience ISRO's technological innovations and IT infrastructure through interactive exhibits, models, and simulations related to satellite communication, navigation systems, and data processing systems.
- Learn about the integration of IT solutions in space research and exploration, emphasizing IT's role in satellite operations, ground control, and data management within ISRO.

**STUDENT DETAILS**

| S.NO | NAME | RRN |
|---|---|---|
| 1. | ABIRAMA VARSHINI V | 220081601003 |
| 2. | ABIRAMI M | 220081601004 |
| 3. | AFSHAN ZEHERA | 220081601005 |
| 4. | ANISH KUMAR N | 220081601007 |
| 5. | ASHWIN N | 220081601008 |
| 6. | ASHWINI S | 220081601009 |
| 7. | ASIN FATHIMA S | 220081601010 |
| 8. | AVANTHIKA ARAVIND | 220081601011 |
| 9. | EMADEEN S | 220081601013 |
| 10. | FARHAT NAUSHEEN | 220081601014 |
| 11. | GOWTHAM S | 220081601016 |
| 12. | GUNALINI R | 220081601017 |
| 13. | HARINI G | 220081601018 |
| 14. | HARISH HASAN M | 220081601019 |
| 15. | HISHAAM AHAMED M | 220081601020 |
| 16. | ISMAIL THOUFEEQ | 220081601022 |
| 17. | JERLIN SIBIYAL A | 220081601025 |
| 18. | KHALID SULTAN K | 220081601026 |
| 19. | MAMTA NASREEN | 220081601028 |
| 20. | MOHAMED ABDUL AZEEZ | 220081601029 |
| 21. | MOHAMED AKRAM S | 220081601030 |
| 22. | MOHAMED FAIZ M R | 220081601031 |
| 23. | MOHAMED FAZHULULLA S | 220081601032 |
| 24. | MOHAMED ISMAIL FAIZAL M | 220081601034 |
| 25. | MOHAMED JASEEN M | 220081601036 |
| 26. | MOHAMED MUHSIN | 220081601038 |
| 27. | MOHAMED NAFIN A | 220081601039 |
| 28. | MOHAMED NIHAL | 220081601040 |
| 29. | MOHAMED RIDHWAN R | 220081601041 |
| 30. | MOHAMED SATHIK N | 220081601042 |
| 31. | MOHAMMAD HARIS YOUSUF | 220081601043 |
| 32. | MOHAMMED HIZBULLAH | 220081601044 |
| 33. | MOHAMMED IMTHIYAS S | 220081601045 |
| 34. | MOHAMMED OMAR RAHMAN | 220081601046 |
| 35. | MOHAMMED SAIFUDDEEN S | 220081601047 |
| 36. | MUHAMMAD HAMTHAN | 220081601048 |
| 37. | MUHAMMADH M | 220081601049 |

| | | |
|---|---|---|
| 38. | NADEEM ISMAIL M | 220081601052 |
| 39. | NIYAJUDEEN N | 220081601053 |
| 40. | PREMNATH R | 220081601055 |
| 41. | RISHIKA RAI | 220081601058 |
| 42. | SANJAY V | 220081601059 |
| 43. | SHRINIVAS J R | 220081601061 |
| 44. | SUMAIYA FAZARIA P J | 220081601063 |
| 45. | SWATHI A | 220081601064 |
| 46. | SWETHA K | 220081601065 |
| 47. | SYED SUHAIL AHMED | 220081601066 |
| 48. | UMAR FAROOK RIZWAN H | 220081601068 |
| 49. | AHAMED NAWFAL | 220081602001 |
| 50. | ASHWANTH JOEL P | 220081602002 |
| 51. | ROSHAN ADHITHYA V.P | 220081602005 |
| 52. | ARAVIND KRISHNA R | 221272601001 |
| 53. | FARIHA HIBA G R | 221272601002 |
| 54. | HEMAMALINI M | 221272601003 |
| 55. | SHAFLA FATHIMA S | 221272601005 |
| 56. | TAMILSELVAN D | 221272601008 |

**Faculty Coordinators**

1. Dr. Mohammed Wajid Khan
   Assistant Professor/ IT
   BSACrescent Institute of Science and Technology , Chennai-48

2. Ms. A. Sonya
   Assistant Professor (Sr. Gr)/ IT
   BSA Crescent Institute of Science and Technology , Chennai-48

India's prowess in space technology is evident through institutions like the National Remote Sensing Centre (NRSC), part of the Indian Space Research Organisation (ISRO). A recent industrial visit to NRSC offered a glimpse into the captivating world of remote sensing, rocket technology, and space exploration.

Commencing with an insightful journey through NRSC's history and purpose, we explored its evolution and significant milestones in remote sensing. NRSC's role in revolutionizing remote sensing technology, aiding sectors like agriculture and disaster management, left a lasting impression.

The visit to NRSC, ISRO, provided valuable insights into India's space technology prowess. From remote sensing evolution to rocket making and ISRO's achievements, it offered a comprehensive perspective on space exploration, igniting a sense of awe and inspiration for science and technology.

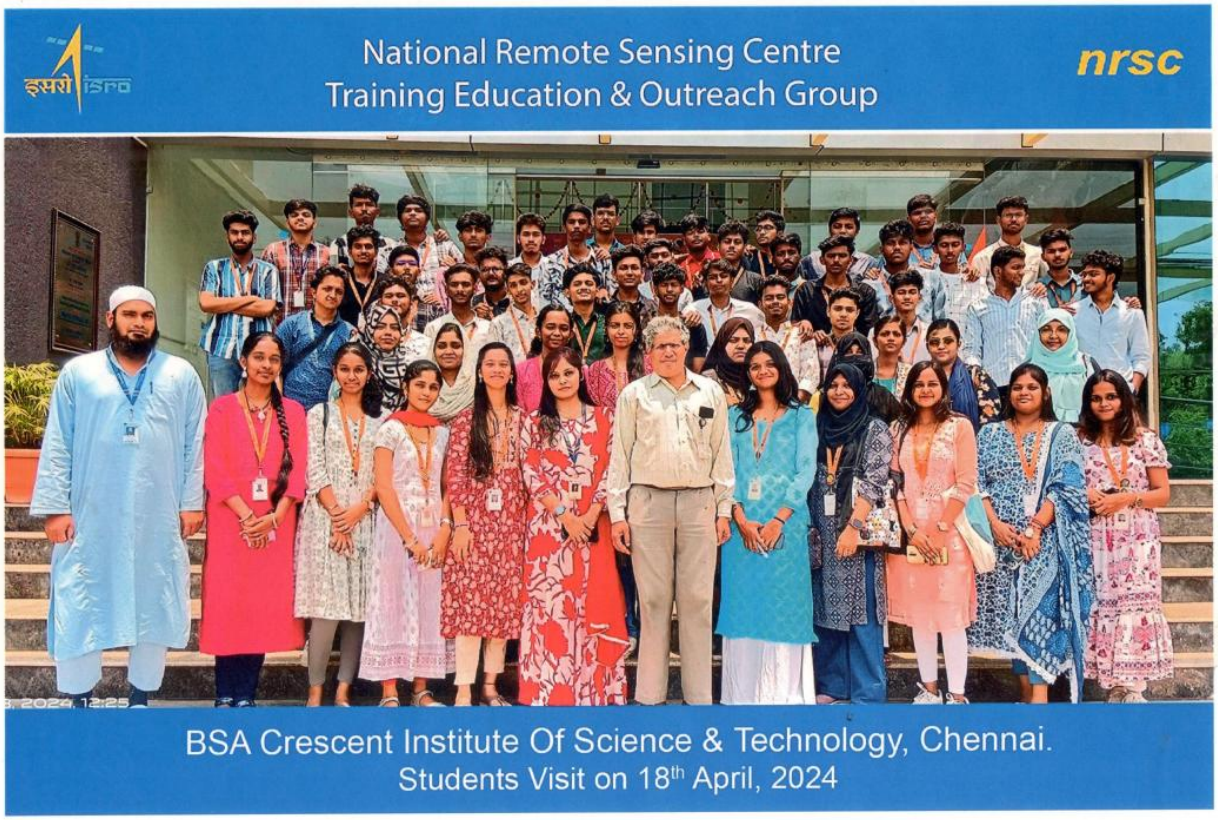

**OUTCOMES OF THE VISIT:**

- Broadened Understanding of Remote Sensing Technology and Space Exploration: Increased awareness and comprehension of remote sensing technology,offering a multidisciplinary perspective beyond traditional IT domains.

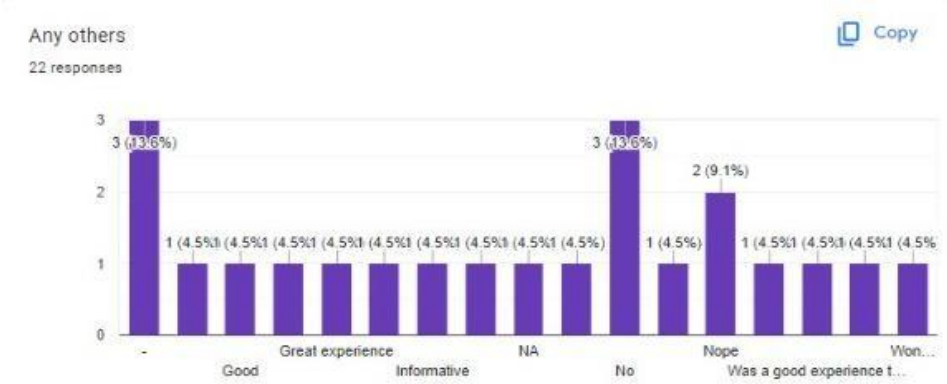
- Networking Opportunities with Industry Professionals: Facilitated interactions with professionals in the space industry, paving the way for potential collaborations and partnerships in fields such as satellite communication systems, data processing technologies, and IT infrastructure.

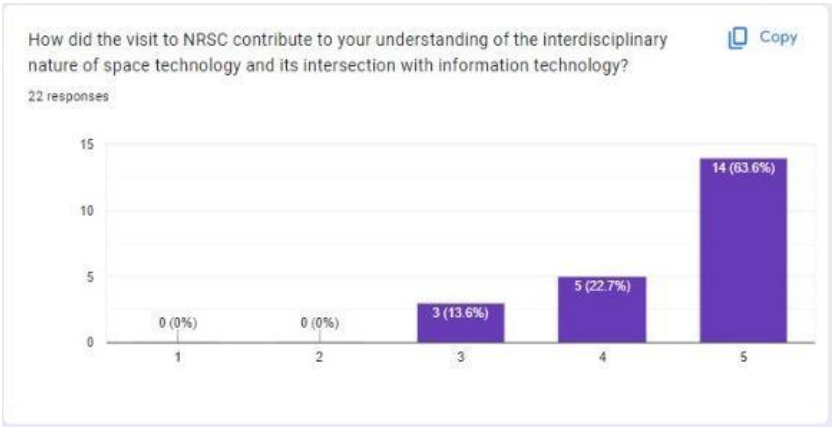
- Expansion of Knowledge in Emerging Technologies: Enhanced understanding of emerging technologies through exploration of ISRO's infrastructure and exposure to network communication systems, contributing to students' awareness of cutting-edge advancements in space exploration and satellite operations.

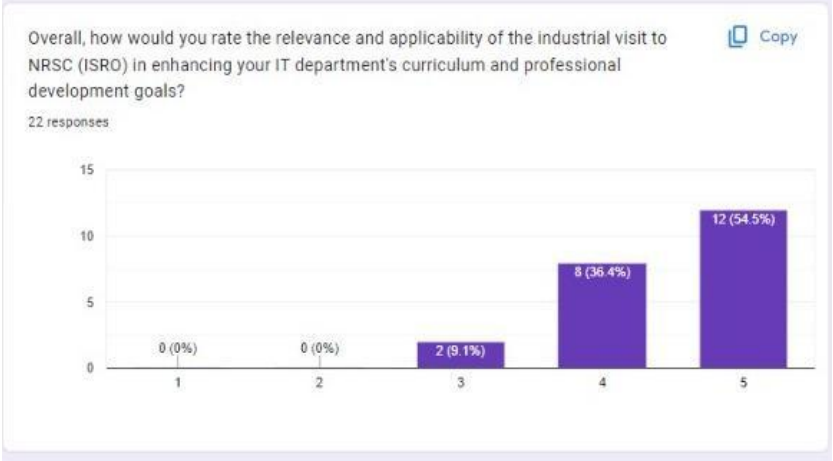

इसरो ISRO
nrsc


इसरो ISRO
National Remote Sensing Centre
Training Education & Outreach Group
nrsc
BSA Crescent Institute Of Science & Technology, Chennai.
Students Visit on 18th April, 2024

**FEEDBACK:**




**Coordinator**
(Dr. Mohammed Wajid Khan)

**HOD/ IT**
(Dr. N.Prakash)