Bhoj Reddy Engineering College for Women

(Sponsored by Sangam Laxmibai Vidyapeet, approved by AICTE and affiliated to JNTUH)
Vinaynagar, IS Sadan Crossroads, Saidabad, Hyderabad – 500 059, Telangana. www.brecw.ac.in

Department of Computer Science and Engineering

20 July 2024

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File No: BRECW/ CSE/ Industrial Visit/ AY 23-24-Even/Circular/ 002 Date: 11/07/2024

Circular

The CSE department is planning for an Industrial visit to National Remote Sensing Centre, Indian Space Research Organisation, Medak Rd, Chinthal, Jeedimetla, Hyderabad, for III B Tech CSE A & B students on 16 July 2024. The visit timings are from 09:30 to 12:30 Hrs.

In this regard ISRO is charging **₹210** per student. The students who are willing to come for the industrial visit should pay an amount of **₹210** through SLV Portal and a hard copy of fee receipt should be submitted to Dr P Deepthi in the CSE department. The last date for paying the fee is 12 July 2024.

Dr P Deepthi
Seminars & Workshops In-charge

11/7/2024
Dr B Raveendranadh Singh
HoD-CSE

Banner:

Activity Report

General Information

Type of Activity	Student Development Program (Foster interaction, Interactive Q&A Session, Case Studies and Real-Life Examples)
Title of the Activity	Industrial Visit
Date/s	16 July 2024
Time	09:30 to 12:30 Hrs
Venue	National Remote Sensing Centre, Indian Space Research Organisation, Medak Road, Chinthal, Jeedimetla, Hyderabad
Collaboration/Sponsor (if any)	SLV

Participants Profile

Type of Participants	III B Tech CSE A & B students
No. of Participants	118 {62 (III CSE A) + 52 (III CSE B) + 4 Staff}

Highlights & Summary of the Activity	The CSE department organized an industrial visit to the National Remote Sensing Centre (NRSC) to provide students with practical insights into remote sensing technologies and their applications. The visit started with a brief introduction to the centre's operations and its significance in space research and development. 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, development of techniques for remote sensing applications including disaster management support, geospatial services for good governance and capacity building for professionals, faculty and students. NRSC operates through multiple campuses to meet national and regional remote sensing data and applications needs of the country. • Main Campus at Balanagar, Hyderabad for Administration, Remote Sensing Applications and Aerial Services • The Campus at Shahnagar for Satellite Data Reception, Data Processing and Dissemination, Earth and Climate Studies and Disaster Management Support • Five Regional Centres at Sector 9, KBHB in Jodhpur (Regional Centre-West), Sadhiknagar at New Delhi (Regional Centre-North), New Salt Lake City in Kolkata (Regional Centre-East), Amaravathy Road in Nagpur (Regional Centre-Central), Karthik Nagar in Bangalore (Regional Centre-South) for promoting remote sensing applications for various states. • Outreach facility at Jeedimetla in Hyderabad for providing training for professionals, faculty and students and for general outreach. • Aircraft operations facility at Begumpet Airport, Hyderabad In the above mentioned the visit was organized at Outreach facility at Jeedimetla in Hyderabad for providing training for professionals, faculty and students and for general outreach.

Overview of Outreach facility at Jeedimetla

The NRSC (National Remote Sensing Centre) Outreach Facility serves as a crucial platform for disseminating knowledge, expertise, and resources related to remote sensing technology and its applications.

Here's an overview:

Mission: The primary mission of the NRSC Outreach Facility is to bridge the gap between Space and remote sensing technology and end-users by providing Lectures, Videos, Exhibits and VGS.

Capacity Building: Through its outreach initiatives, the NRSC aims to build the capacity of individuals and organizations to effectively harness remote sensing technology for decision-making, policy formulation, and sustainable development initiatives.

Collaboration and Networking: The NRSC Outreach Facility collaborates with national partners, including private space agencies, research institutions, colleges, schools and NGOs, to promote knowledge sharing, collaborative research, and the exchange of best practices in remote sensing applications.

Public Awareness: In addition to professional training and capacity building activities, the facility also engages in public outreach and awareness campaigns to promote the understanding and appreciation of Space and remote sensing technology among the general public. This may include organizing exhibitions, public lectures, and educational programs targeting schools and community groups.

Overall, the NRSC Outreach Facility plays a vital role in promoting the widespread adoption and effective utilization of Space and Remote sensing technology for addressing societal challenges and fostering sustainable development.

Welcome and Introduction:

The visit began with a warm welcome and an introductory session about NRSC's mission, vision, and its role in space research and remote sensing.

Tour of Facilities:

Students were taken on a guided tour of the satellite data reception station and data processing units. They observed the real-time reception and processing of satellite data.

	Expert Sessions: Experts from NRSC provided detailed explanations of satellite design, launch processes, data acquisition, and data processing. Experts from NRSC explained the process of satellite operations in detail. They covered various stages, including satellite design, launch, data acquisition, and data processing. The students were given a tour of the satellite data reception station and the data processing units. The experts demonstrated how satellite data is received, processed, and analyzed for various applications such as disaster management, environmental monitoring, urban planning, and natural resource management. The students also had the opportunity to interact with scientists and engineers, gaining valuable knowledge about current projects and prospects in the field of remote sensing. The experts shared insights into the latest technologies and advancements in satellite imagery and geographic information systems (GIS).

Key Take aways	**Understanding Satellite Operations:** Detailed insights into satellite design, launch, data acquisition, and data processing. Knowledge of how satellite data is received, processed, and analyzed. **Applications of Remote Sensing:** Practical applications of satellite data in disaster management, environmental monitoring, urban planning, and natural resource management. **Advanced Technologies:** Exposure to the latest advancements in satellite imagery and geographic information systems (GIS). **Interaction with Experts:** Opportunity to interact with scientists and engineers, gaining valuable insights into current projects and future prospects in remote sensing. **Career Opportunities:** Information on potential career paths in space research and remote sensing.

	Inspiration and Motivation: Encouragement for students to explore and innovate in the field of space research and technology. The CSE department thank all participants for their engagement and support in making this visit a successful learning experience.

Follow-up Plan	**Objectives:** Encourage students to explore further research and career opportunities in remote sensing and space technology. Gather feedback to improve future industrial visits. **Feedback Collection:** Collected feedback from students and staff to gather their insights and suggestions. **Research Projects:** Encourage students to undertake projects or research based on their learnings from the visit. Provide guidance and resources for students interested in exploring remote sensing technologies further. **Future Industrial Visits:** Plan follow-up industrial visits to other relevant organizations and research centres to broaden students' exposure. Use the feedback from this visit to enhance the planning and execution of future visits. The visit concluded with a Q&A session, where students clarified their doubts and discussed potential career opportunities in space research and remote sensing. The CSE department expresses its gratitude to the staff and students for their participation and support in making this industrial visit a success.

Synopsis of the Activity (Description)

The primary objective of the industrial visit was to provide III B Tech CSE A & B students with practical exposure to remote sensing technologies and their applications, enhancing their understanding of satellite operations and space research.

Outcome: The industrial visit was highly educational and informative. Students gained valuable practical knowledge about remote sensing and satellite technologies. The interaction with industry experts provided them with a clearer understanding of the theoretical concepts learned in the classroom, as well as inspiration for future academic and career pursuits in space research and technology.

Conclusion: The visit to NRSC was a successful initiative by the CSE department to bridge the gap between theoretical learning and practical application, thereby enhancing the overall educational experience of the students. The department plans to organize similar visits in the future to continue providing students with valuable industry exposure.

Report prepared by:

Name of the Organiser	Dr P Deepthi (Incharge Faculty)
Designation/Title	Associate Professor, CSE department
Signature	

Dr P Deepthi Seminars & Workshops In-charge	Dr B Raveendranadh Singh HoD-CSE	G Dayakar Reddy Vice Principal	Dr J Madhavan Principal

Geo-Tag Photos:

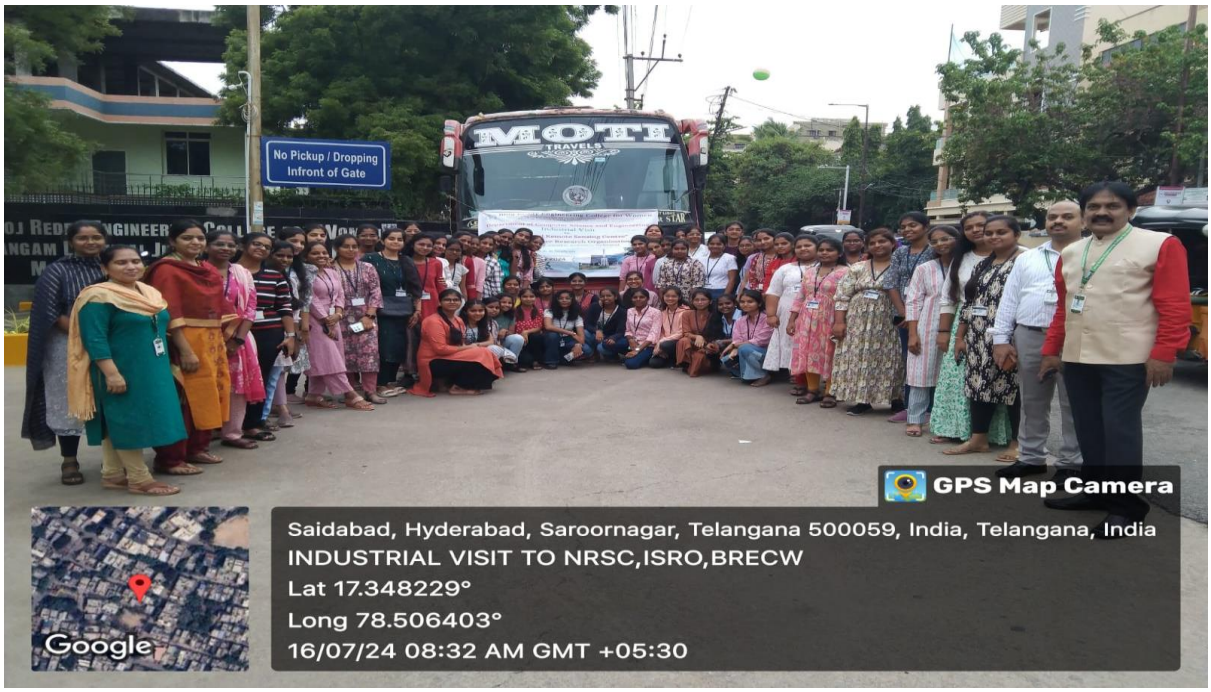

Fig 1: III CSE A Students going to Industrial Visit along with HoD-CSE and Staff

Fig 2: III CSE B Students going to Industrial Visit along with HoD-CSE and Staff

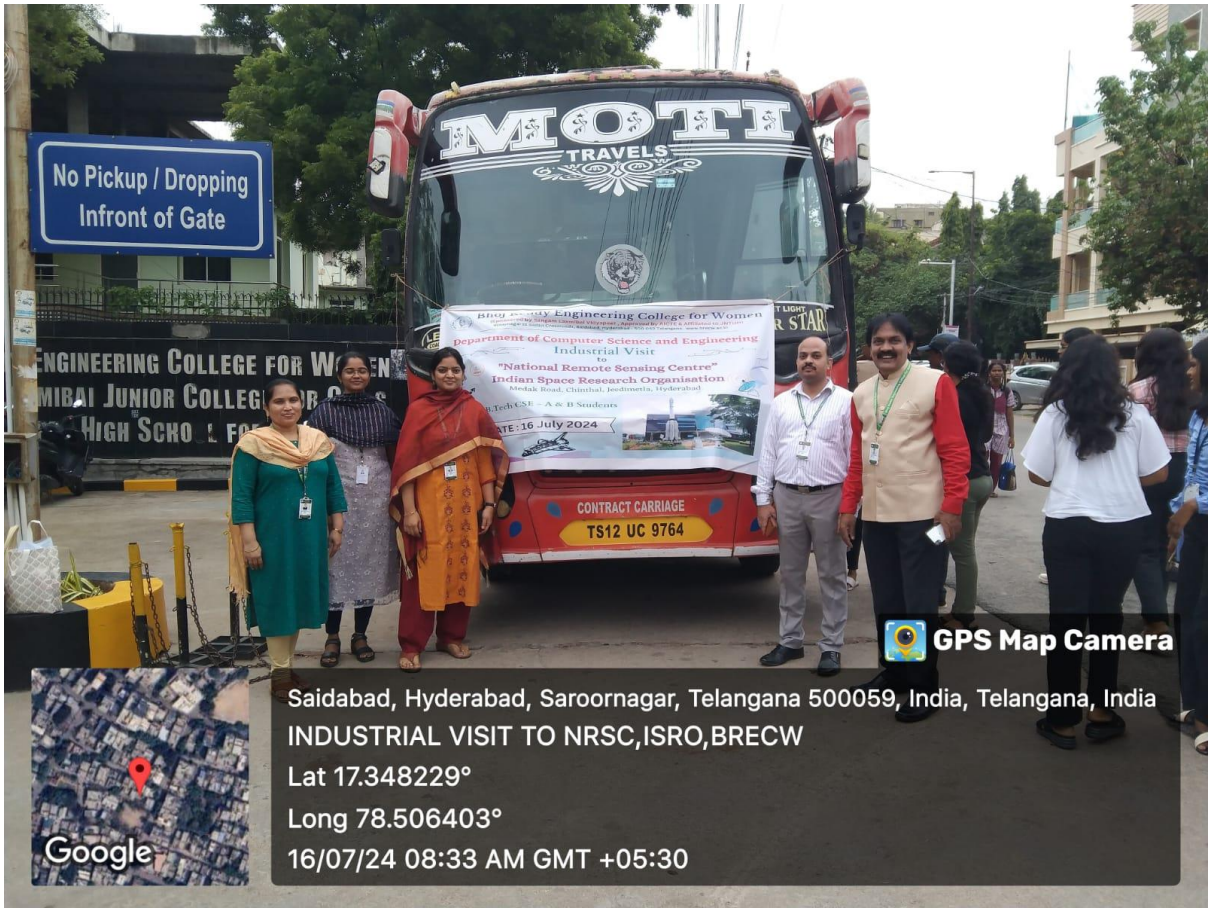

Fig 3: HoD-CSE and Staff

Fig 4: III CSE A Students along CSE Staff and Scientists of ISRO at NRSC

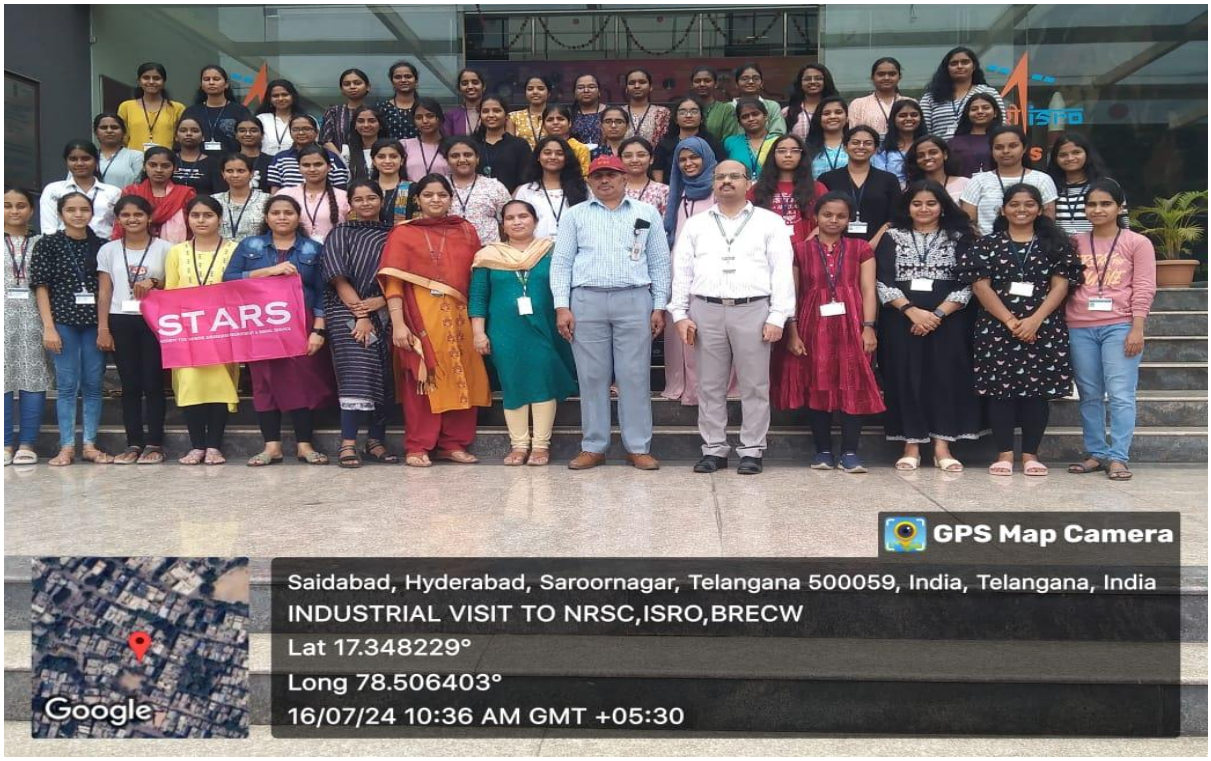

Fig 5: III CSEB Students along CSE Staff and Scientists of ISRO at NRSC

Fig 6: III CSE Students along CSE Staff in auditorium at NRSC

Fig 7: III CSE Students along CSE Staff in auditorium at NRSC

Fig 8: III CSE Students along CSE Staff in auditorium at NRSC

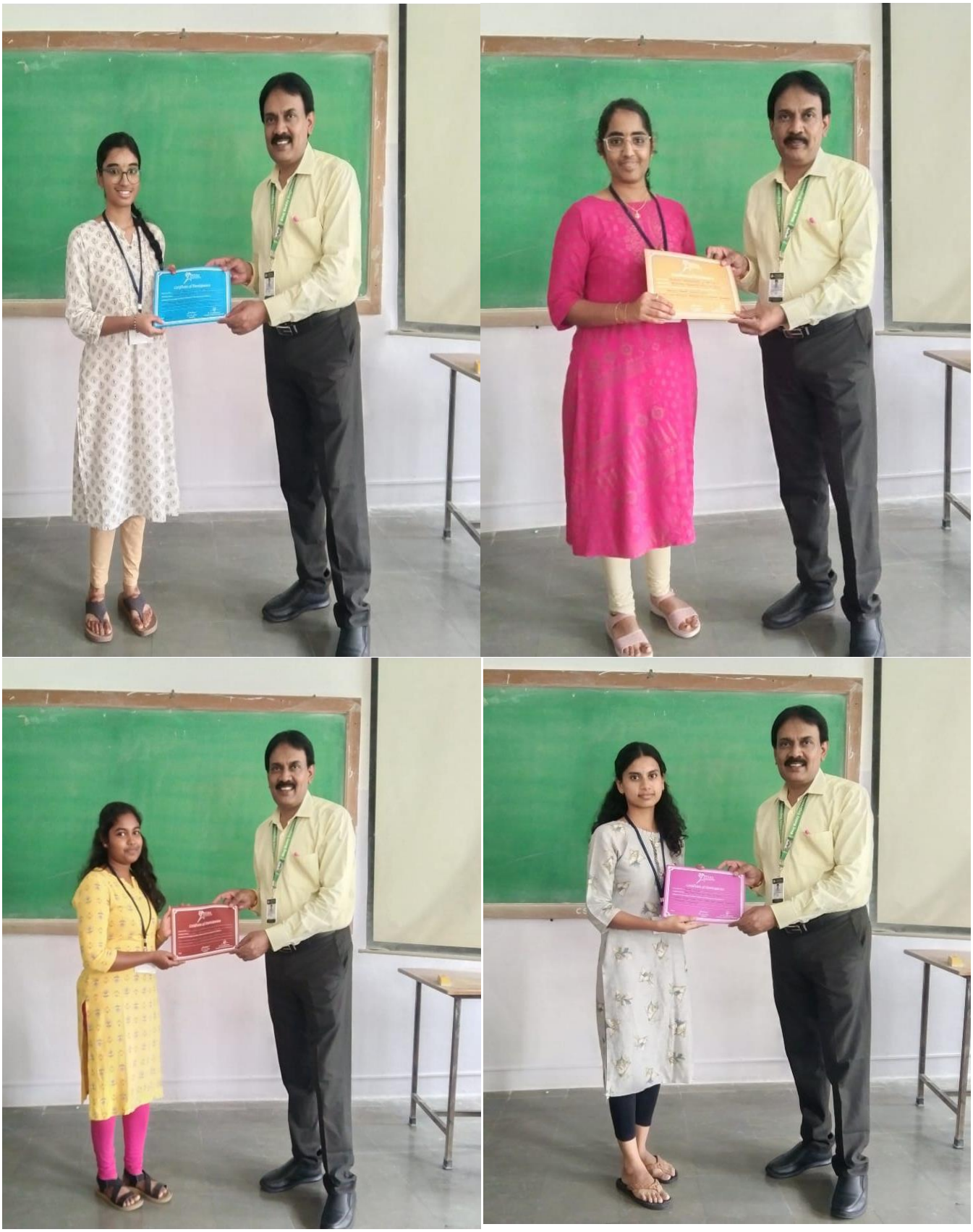

Fig 9: III CSE Students receiving Industrial Visit Certificates