Report on the Visit to AICTE IDEA Lab at Tripura Institute of Technology

Date of Visit: 21st February 2025
Location: Tripura Institute of Technology (TIT), Tripura
Attendees: Three Teachers and 45 Students (BBA 2nd & 4th Semester)

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1. Introduction

On the 21st of February 2025, a group consisting of three teachers and 45 students from the BBA 2nd and 4th Semesters visited the **AICTE IDEA Lab** at the Tripura Institute of Technology (TIT), Tripura. The visit was aimed at providing the students with an exposure to the advanced technology-driven learning environment at the AICTE IDEA Lab, where various innovative technologies and projects are implemented. The objective was to understand the significance of the AICTE IDEA Lab in fostering creativity, innovation, and research among young minds and to inspire students to explore the field of scientific model-making and technological advancements.

2. Overview of AICTE IDEA Lab

The **AICTE IDEA Lab (Innovation, Design, and Entrepreneurship Academy)** is an initiative by the **All-India Council for Technical Education (AICTE)**. It aims to promote innovation and entrepreneurship at the academic level by providing students with access to modern tools and resources that foster creativity and practical learning. The lab encourages students to create scientific models, develop prototypes, and explore cutting-edge technologies.

The **AICTE IDEA Lab** at Tripura Institute of Technology offers a platform where students can experiment with new ideas, work on interdisciplinary projects, and gain hands-on experience in a wide range of technical fields, including electronics, robotics, drone technology, and more. It plays a pivotal role in cultivating a spirit of innovation and problem-solving among the youth, which is essential for the development of a technology-driven society.

3. Purpose of the Visit

The primary purpose of the visit was to:

- Introduce students to the AICTE IDEA Lab and its mission to foster innovation, design, and entrepreneurship.
- Provide students with practical exposure to various scientific models and advanced technologies in fields such as electronics, drone technology.
- Encourage students to think creatively and use the tools available in the lab to design and develop their own models to consider technology-driven entrepreneurship as a viable career option.

4. Key Activities and Observations: During the visit, the students were taken on a guided tour of the AICTE IDEA Lab, where they were introduced to a variety of scientific models, technologies, and projects. The following key activities were observed:

a. Introduction to AICTE IDEA Lab: The visit began with an informative session led by a teacher from the Tripura Institute of Technology, who introduced the students to the concept and objectives of the AICTE IDEA Lab. The teacher explained the role of AICTE in fostering innovation and entrepreneurship through its IDEA Lab initiative. Students were made aware of how the lab serves as a hub for research, creativity, and interdisciplinary collaboration, offering a space for students to experiment with various engineering and technological concepts.

b. Scientific Models in Electronics and Electrical Engineering: One of the highlights of the visit was the demonstration of scientific models related to the field of **electronics and electrical engineering**. Some of the key models and projects that were shown to the students included:

- **Electric Circuits**: Demonstrations of various circuit setups, including analog and digital circuits, showcasing the practical application of electrical principles.
- **Sensors and Actuators**: Explanation of how sensors are used in various systems, including environmental monitoring systems, automation, and robotics.
- **Microcontrollers and Embedded Systems**: Students were shown models based on microcontroller programming, where they could observe how embedded systems control devices in real-time.

These models provided valuable insights into the practical application of electrical and electronics theories and demonstrated how small-scale prototypes can be used to solve complex problems.

c. Drone Technology and Applications: Another key area of focus during the visit was **drone technology**. The teacher explained the working principles of drones, their components (motors, flight controllers, and sensors), and their diverse applications in fields such as surveillance, delivery, agriculture.

d. Encouragement of Innovation and Creativity: The visit emphasized the importance of **creativity** and **entrepreneurship** in the field of technology. Students were encouraged to think beyond theoretical concepts and explore the possibility of designing their own scientific models. The teacher motivated students to consider **model-building** as a means to transform their ideas into practical solutions, which can eventually lead to the development of innovative products and technologies.

The teacher also highlighted the role of interdisciplinary learning in innovation and urged students to collaborate across various fields such as electronics, computer science, and mechanical engineering to create holistic solutions. Students were encouraged to leverage the tools and resources available in the AICTE IDEA Lab to bring their ideas to life.

5. Conclusion

The visit to the AICTE IDEA Lab at the Tripura Institute of Technology proved to be an invaluable learning experience for the BBA students. It provided them with practical exposure to cutting-edge technologies, including electronics, drone technology, and robotics, and introduced them to the concept of innovation and entrepreneurship.

The AICTE IDEA Lab serves as a catalyst for fostering creativity and problem-solving among students, and the visit successfully conveyed the importance of such initiatives in shaping the future of technology and entrepreneurship. By giving students access to tools for hands-on experimentation and encouraging them to develop their own models, the AICTE IDEA Lab is helping to nurture the next generation of innovators and entrepreneurs.

Report Prepared by:
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Assistant Professor & IIC Convenor
Holy Cross College, Agartala.

Attendance of Students:

ATL Visit at TIT

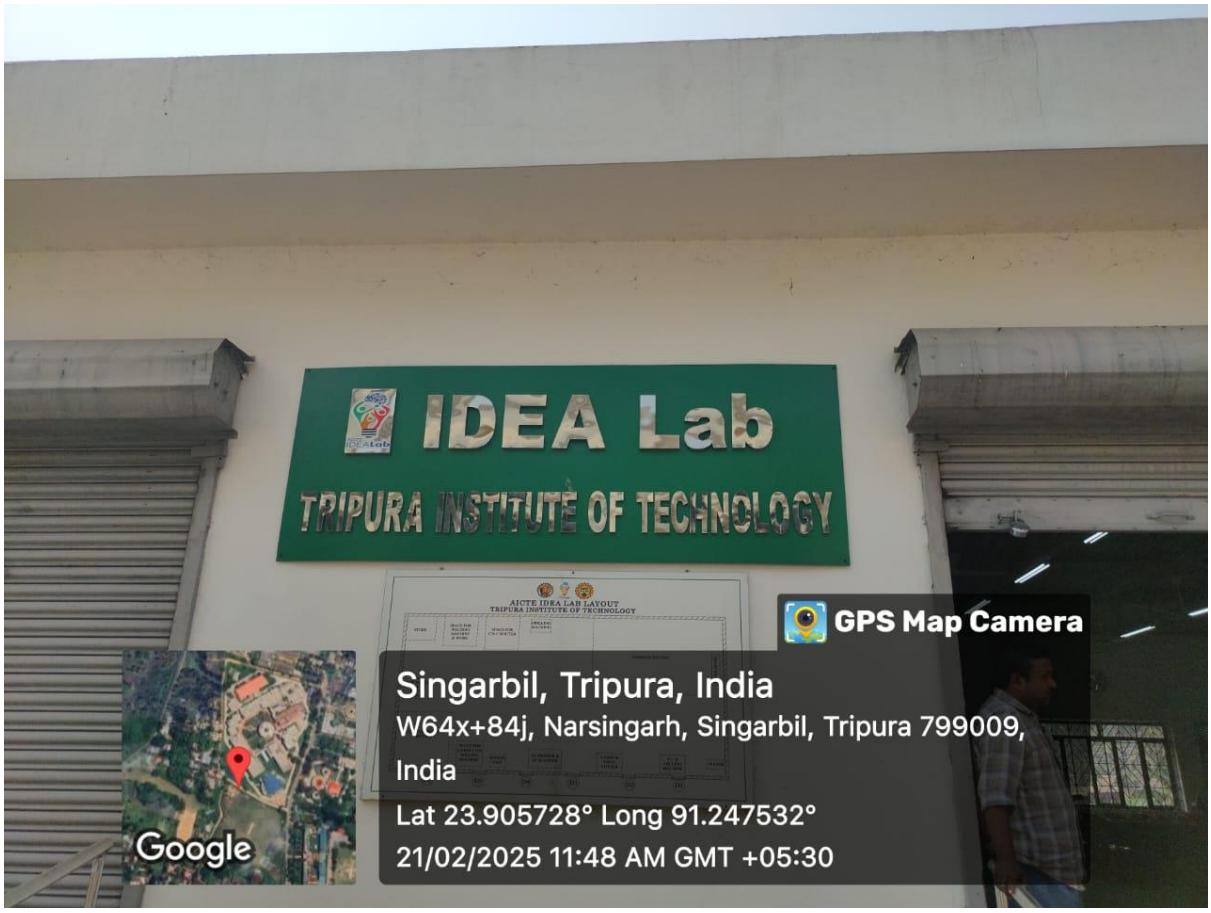
List of Participants (21-FEB-2025)

Department of Business Administration

Sl. No.	Full Signature with Date	Semester
1	Raida Debbarma	4th
2	Amit Debbarma	4th
3	Aniket Debbarma	4th
4	Sekhar Jamatia	4th
5	Usprangsu Debbarma	4th
6	Shefali Jamatia	4th
7	Rina Noatia	4th
8	Mary grace uchoi	4th
9	Swapnadwip Saha	4th
10	Disha Majumdar	4th
11	Chonghori Debbarma	4th
12	Aditi Debbarma	4th
13	Jalia Debbarma	4th
14	Chandrashib Das	4th
15	Sourav Kar	4th
16	Diptanu Debbarma	4th
17	Moinaul Sutradhar	4th
18	Gaurav Saha	4th
19	Subham Saha	4th
20	Sankhasree Dey	4th

Sl. No.	Full Signature with Date	Semester
21	Tusha Saha	4th
22	Pritam Saha	4th
23	Ankit Saha	4th
24	Bipasha Das	4th
25	Sabyan Das	4th
26	Kripesh Tripura	2nd
27	Abhideep Das	4th
28	Sajdeep Debnath	2nd
29	Sagata Das	2nd
30	Smritideep Debnath	2nd
31	Joydeep Das	2nd
32	Nitya Krishna Rai	2nd
33	Pipasha chowdhury	2nd
34	Sarmistha Datta	2nd
35	Simtalchim Halam	2nd
36	Liza Debbarma	2nd
37	Ali Jamatia	2nd
38	Aditya Kalai Kalai	2nd
39	Abhijit Debbarma	2nd
40	Dipal Jamatia	2nd
41	Naising Jamatia	2nd.
42	Penny Darlong	2nd

Sl. No.	Full Signature with Date	Semester
43	Disha Tripura	2nd
44	Anupradip Ghosh	2nd
45	Chayon Debbarma	2nd
46		
47		


IDEA Lab
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AICTE IDEA LAB LAYOUT
TRIPURA INSTITUTE OF TECHNOLOGY
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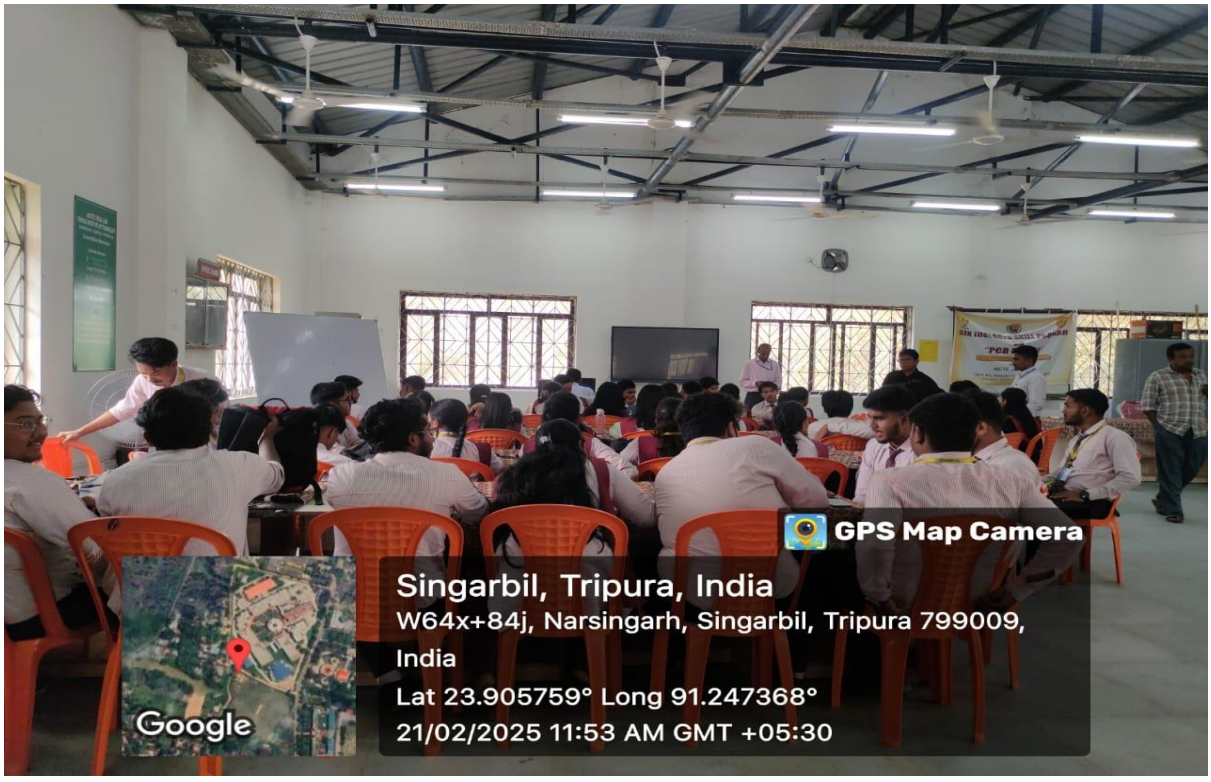
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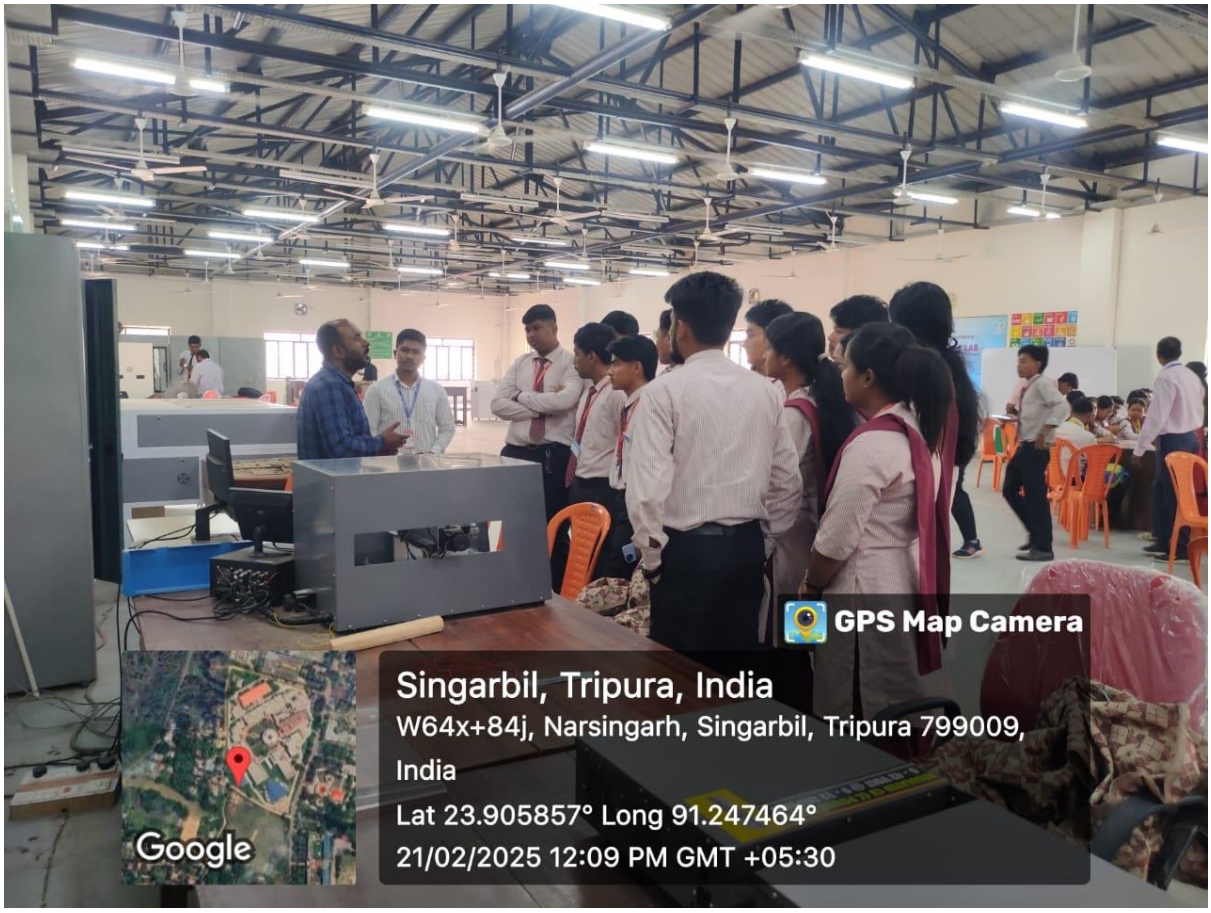
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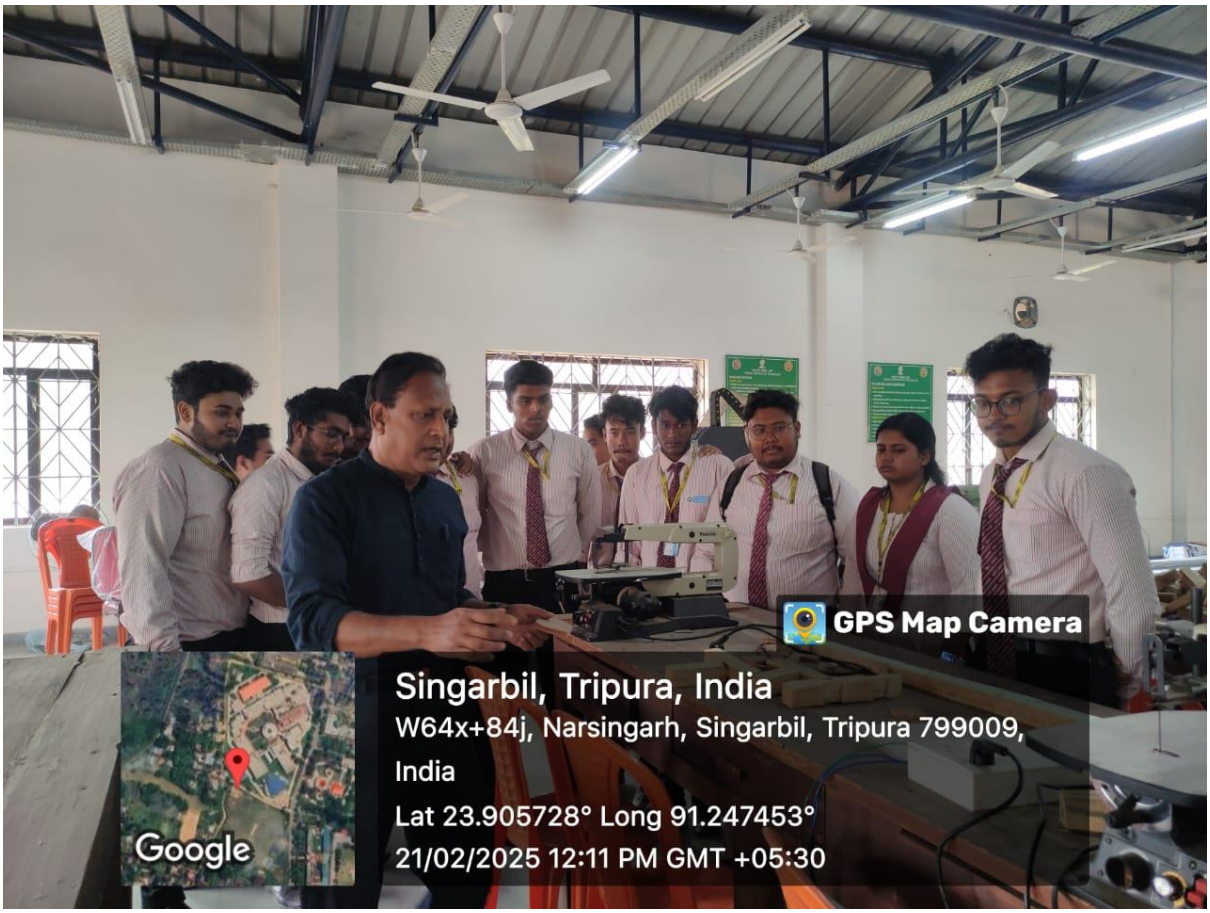
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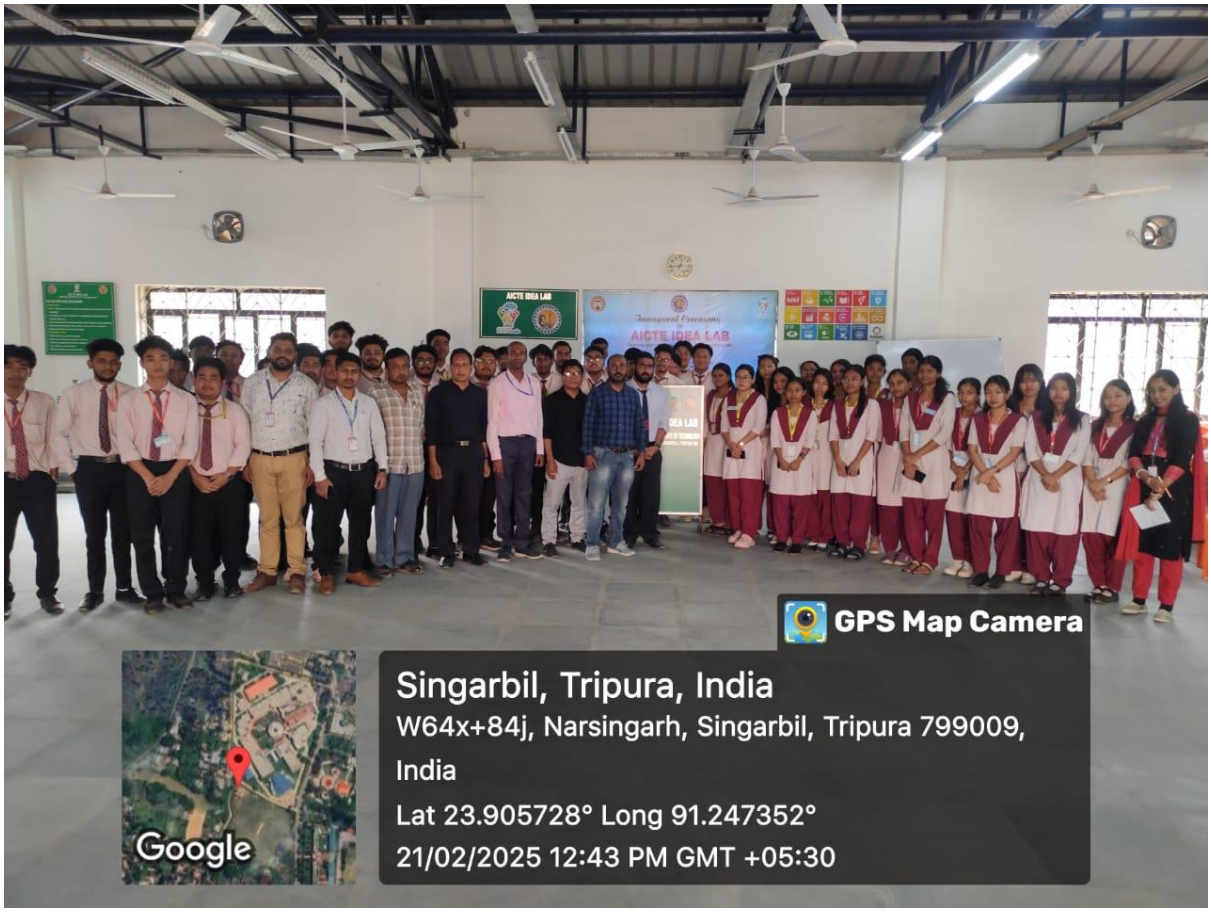
AICTE IDEA LAB
Inaugural Ceremony
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