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A Report on the International Science Exchange Program at National Institute of Technology, Ichinoseki College (KOSEN), Japan under the Sakura Science Exchange Program (JST) attended by the Delegation from MITS, Madanapalle from 16.11.2025 to 23.11.2025

Report Submitted by: Dr. Vamsi Bandi, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence), Madanapalle Institute of Technology & Science (Deemed to be University), Madanapalle. Faculty Coordinator (on behalf of the MITS Delegation to Japan)

Participants from MITS:

Faculty: Dr. Vamsi Bandi, Assistant Professor, Dept of CSE(AI), Emp ID: 69003108

Student Participants: (7 students from CSE-AI, CST, CSE, and ECE)

1. **Chershitha Reddy Chapati, IV Year, CSE-A, 22691A0544**
2. **Hema Charitha Kodanda, IV Year, CST-A, 22691A2864**
3. **Aniket Arun Sasmal, IV Year, CST-A, 22691A2814**
4. **Lokesh Ayyaswamy, IV Year, AI-B, 22691A3180**
5. **Tejasree Kothapalli, IV Year, AI-C, 22691A31H2**
6. **Vyshnavi Sarode, IV Year, AI-C, 22691A31J2**
7. **Tejeswar Reddy Meegada, IV Year, ECE, 22691A04S1**

Report Received on 25.11.2025

Acknowledgements to NIT, Ichinoseki College:

The delegation from Madanapalle Institute of Technology & Science (Deemed to be University), Madanapalle, sincerely thanks the **Japan Science and Technology Agency (JST)** for giving us the opportunity to participate in the **Sakura Science Exchange Program 2025**. This program offered our students and faculty a valuable platform to experience Japanese science, technology, and culture first-hand.

We gratefully acknowledge the support and hospitality of the **National Institute of Technology, Ichinoseki College (KOSEN), Japan**. We are especially thankful to **Dr. Junya Kobayashi, President of NIT Ichinoseki College**, for his warm welcome and for the positive discussions on future collaboration and student internships.

Our heartfelt appreciation goes to **Dr. Yoko Tominaga**, whose guidance and coordination made every part of the program smooth and meaningful. We also extend our thanks to **Prof. Masto Wayama**, **Ms. Rie Shimokawa**, and all the faculty members and students who spent their time interacting with our team and sharing their expertise.

We deeply appreciate the kindness of the host families: **Ishi-san, Miyuki-san, Oikawa-san, and Yokou-san**, who opened their homes to us and made our stay in Ichinoseki comfortable and memorable.

Acknowledgements to MITS, Madanapalle:

We express our sincere gratitude to the **Management of Madanapalle Institute of Technology & Science (Deemed to be University)** for their continuous encouragement and support in enabling this international academic visit. We extend heartfelt thanks to **Dr. N. Vijaya Bhaskar Choudary, Chancellor**, **Mr. N. Dwarakanath, Pro-Chancellor**, and **Dr. C. Yuvaraj, Vice-Chancellor (In-Charge)** for providing the institutional leadership that made this global exposure possible. We also acknowledge the guidance of **Dr. P. Ramanathan, Principal**, and **Dr. C. Kamal Basha, Vice-Principal (Administration)** for facilitating all major arrangements required for the visit.

Our sincere appreciation goes to **Dr. Sremmant Basu, Dean (Administration, International Relations & UGC Affairs)**, for his consistent support throughout the planning and coordination of this international engagement. We also thank **Mrs. U. Vijaya Lakshmi, Senior Manager – International Relations Office**, for her dedicated efforts in handling visa coordination, travel arrangements, and communication with NIT Ichinoseki College, Japan. We acknowledge the support of **Dr. D. Pradeep Kumar, Registrar**, and **Mrs. M. Prathibha, Additional Registrar**, along with the administrative team, for ensuring the smooth execution of all formal procedures.

We would also like to thank the respective Heads of the Departments for their encouragement and for permitting the students to participate in this program. These include **Dr. M. Sreedevi, Professor & Head – CSE**, **Dr. R. Kalpana, Professor & Head – AI, Dr. K. Dinesh, Associate Professor & Head – CST** and **Dr. S. Rajasekaran, Professor & Head – ECE**. Their support played a significant role in enabling the students to represent MITS in this global learning experience.

Program Overview:

The **Sakura Science Exchange Program**, organized by the **Japan Science and Technology Agency (JST)**, is a prestigious **fully funded international initiative** that encourages young learners, educators, and researchers from around the world to explore Japan's science, technology, culture, and innovation ecosystem. By providing complete financial support for travel, accommodation, academic activities, and cultural experiences, the program enables participants to engage deeply with Japan's advanced learning environment without any financial constraints.

As part of this initiative, the **National Institute of Technology, Ichinoseki College (KOSEN), Japan**, invited a delegation from **Madanapalle Institute of Technology & Science (Deemed to be University), Madanapalle**, to participate in a structured international learning program held from **16th November 2025 to 23rd November 2025**.

The visit centered around the **AI × EV International Co-Creation Project: Connecting Future Mobility with PIUS**, which introduced students to the integration of artificial intelligence, autonomous driving principles, and electric vehicle technologies. Through lectures, laboratory experiences, simulations, industrial visits, technical demonstrations, and collaborative discussions with Japanese faculty and students, the delegation gained hands-on exposure to Japan's approach to next-generation mobility development.

Beyond the technical components, the program also provided meaningful opportunities for **cultural immersion and global engagement**. The delegation interacted with Japanese students, experienced local traditions such as the **Mochi Festival**, visited historical and culturally significant sites including **Chūson-ji Temple**, and stayed with local host families who extended warm hospitality throughout the visit.

Through this fully funded program, students and faculty from MITS were able to explore Japan's engineering education model, understand practical applications of robotics and EV systems, and participate in enriching academic exchanges that reflect Japan's commitment to innovation, collaboration, and global scientific partnership.

Objectives of the Program:

The key objectives of the Sakura Science Exchange Program visit include:

1. Academic Exposure

To provide students with direct exposure to advanced technologies in robotics, electric vehicles, computer engineering, and AI-driven mobility.

2. Collaborative Learning

To engage in joint learning activities through classroom sessions, lab demonstrations, and academic interactions with Japanese faculty and students.

3. Research Awareness

To understand Japan's research ecosystem and identify potential areas for future collaboration in AI, EV systems, and smart mobility.

4. Cultural Exchange

To experience Japanese traditions, values, and social practices through cultural activities, temple visits, and participation in community events like the Mochi Festival.

5. Institutional Collaboration

To strengthen academic ties between MITS and NIT Ichinoseki, including discussions on:

- Student internships
- Faculty visits
- Future exchange programs
- Long-term academic cooperation

6. Skill Development

To enhance technical, communication, and intercultural competencies among students through real-world exposure and international learning experiences.

Day-wise Report:

1. DAY 0: 16th November 2025 - Departure from India to Japan

The MITS delegation began its international journey on **16th November 2025** from **Kempegowda International Airport, Bengaluru (IST)**. The team arrived at the airport in the morning and completed immigration, baggage drop, and security checks at **Terminal 2**.

The delegation boarded **Singapore Airlines Flight SQ509** from **Bengaluru to Singapore at 11:45 AM IST**. After a smooth journey, the flight arrived at **Singapore Changi Airport (SGT)** in the evening.

At Changi Airport, the team moved to **Terminal 2, Gate F40**, for the connecting flight. After check-in and short transit time, the delegation boarded **Flight SQ638** from **Singapore to Narita at 11:55 PM SGT**. The long-haul flight marked the beginning of the academic and cultural experience awaiting the team in Japan.

2. Day 1: 17th November 2025 - Arrival in Japan and Transfer to Ichinoseki (JST)

The delegation arrived at **Narita International Airport, Tokyo** on **17th November 2025 at 8:30 AM JST** after completing the overnight journey from Singapore. Upon arrival, the team proceeded through **immigration**, completed **customs verification**, and collected their luggage at Terminal 2.

At the arrival gate, the delegation was warmly welcomed by **Prof. Yoko Tominaga** and **Prof. Masto Wayama** from the National Institute of Technology, Ichinoseki College (KOSEN). Their presence offered a reassuring and pleasant start to the team's first day in Japan.

After assembling, the group used their **Suica travel cards** to board the **Narita Express Train**, beginning their journey towards central Tokyo. The team reached **Tokyo Station at 11:54 AM JST**. Following a short break,

the delegation boarded the **Shinkansen (Bullet Train)** departing at **2:00 PM JST**, covering nearly 500 km at remarkable speed and arriving at **Ichinoseki Station at 4:30 PM JST**.

Upon arrival, the Sakura faculty coordinated transportation to the assigned guest houses. The accommodation was arranged as follows:

Boys Guest House (Hosted by Ishi-san & Miyuki-san):

- Aniket Arun Sasmal アニケット・アルン・サスマル
- Lokesh Ayyaswamy ロケッシュ・アイヤスワミ
- Tejeswar Reddy Meegada テジェスワル・レッディ・ミーガダ
- Dr. Vamsi Bandi ドクター・ヴァムシ・バンディ

Girls Guest House (Hosted by Oikawa-san & Yokou-san):

- Chershitha Reddy Chapati チャーシタ・レッディ・チャパティ
- Hema Charitha Kodanda ヘマ・チャリタ・コダンダ
- Tejasree Kothapalli テジャスリー・コタパッリ
- Vyshnavi Sarode ヴァイシュナヴィ・サローデ

In the evening, the host families prepared a warm **Japanese home-style dinner**, offering the students and faculty their first authentic cultural experience in Ichinoseki. The hospitality extended by the hosts made the team feel welcomed and comfortable from the very first day.

MITS Team with Prof. Masto Wayama Sensei

MITS Team with Prof. Yoko Tominaga Sensei and Prof. Masto Wayama Sensei

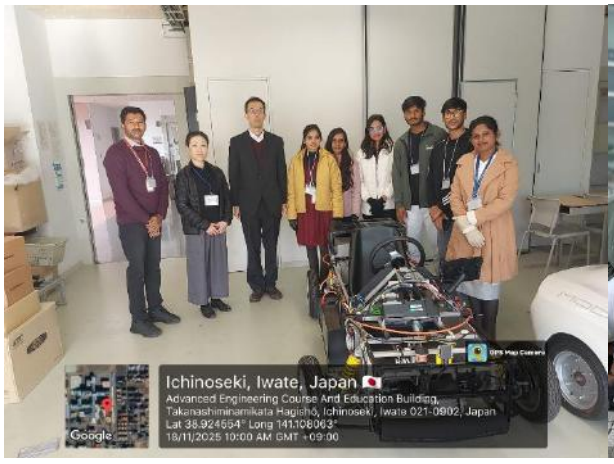
3. Day 2: 18th November 2025 - Orientation, EV Lab Activities, Technical Presentation & Cultural Exchange

The second day of the program began with breakfast at the guest houses, after which the delegation reached **NIT Ichinoseki College at 8:30 AM JST**. The team was warmly received by **Prof. Yoko Tominaga**, who guided them to the meeting room. At **9:00 AM JST**, she conducted a formal **orientation session**, explaining the complete itinerary, safety instructions, campus guidelines, laboratory schedules, and cultural expectations for the week.

During this session, the participants received their **official NIT Ichinoseki ID cards**, followed by an introduction to the **AI × EV International Co-Creation Project**, which served as the core theme of the academic component of the visit. At **9:30 AM JST**, a **token** of **appreciation** from MITS was presented to **Prof. Yoko.**

At 9:48 AM JST, the delegation proceeded to the Electric Vehicle (EV) Laboratory, where they received hands-on exposure to the educational EV kit car “PIUS.” The knowledge transfer session began at 9:55 AM JST, covering EV structure, sensors, battery configuration, microcontroller integration, autonomous driving basics, and image-based navigation concepts.

A memorable highlight of the session was the **EV test-drive experience** at **10:02 AM JST**, where students learned about low-speed autonomous controls and observed practical demonstrations conducted by the technical team.



The delegation then had a scheduled meeting with **President Dr. Junya Kobayashi** from **10:30 AM to 10:35 AM JST**. The President appreciated the participation of MITS in the Sakura Science Program and emphasized the importance of continued collaboration between the two institutions. A formal gift was presented to the President as a gesture of goodwill.

MITS Team with President Dr. Junya Kobayashi

Following this, the team visited the **Mechanical Engineering Workshop** at **10:55 AM JST**, where they explored precision instruments, CNC machines, and first-year lab facilities. A guided practical demonstration was provided at **11:12 AM JST**, focusing on material cutting, machining, and automation alignment tools.

From **11:45 AM JST**, the delegation interacted with **Prof. Goutam** and **Prof. Basabi**, who offered insights into Japanese academic culture and student expectations. Prof. Basabi also delivered a short briefing on Japanese customs, etiquette, and daily life at **11:55 AM JST**, which helped the students better understand local cultural norms.

MITS Team with Prof. Goutam Sensei and Prof. Basabi Sensi

Lunch was arranged in the college canteen at **12:02 PM JST**, where the MITS team experienced a traditional Japanese meal consisting of **sticky rice, tofu bowl, sautéed broccoli, and yogurt**.

In the afternoon, the team attended an interactive classroom session at **1:39 PM JST**, followed by a technical talk delivered by **Dr. Vamsi Bandi** at **1:50 PM JST** on **Neural Networks and Digital Twin Technology**. The session received positive feedback from Japanese students and faculty.

At **2:18 PM JST**, the students from both institutions participated in a collaborative interaction session, sharing perspectives on academics, culture, and career interests.

The day concluded with a visit to the **F1 Formula Club** at **3:30 PM JST**, where the students observed innovation projects. This was followed by an engaging interaction with international students at **4:05 PM JST**.

At **4:16 PM JST**, the delegation handed over the stage to MITS students, who presented about **Indian culture, traditions, and festivals**, followed by an open **Q&A session** at **4:42 PM JST**. The audience appreciated the diversity and enthusiasm showcased by the MITS team.

While returning to the guest house at **5:10 PM JST**, the delegation experienced **snowfall at –2°C**, marking a memorable end to the day.

4. Day 3: 19th November 2025 - Robotics Lab Visits, Classroom Interaction, and Computer Architecture Lab

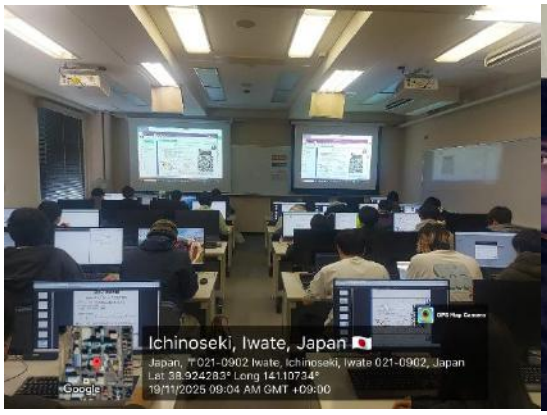
The third day of the program began with the delegation leaving the guest houses at **7:50 AM JST** and arriving at **NIT Ichinoseki College by 8:30 AM JST**. Upon arrival, the team met **Prof. Yoko Tominaga**, **Prof. Shimokawa**, and **Prof. Masto Wayama**, who briefed them about the day's schedule and academic activities.

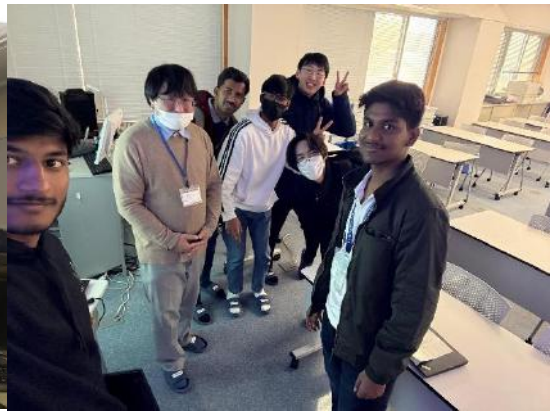
At **9:10 AM JST**, the group visited the **Robotic Simulation Laboratory**, where they observed simulation-based robotic environments, autonomous path-planning modules, and sensor-integrated robotic systems used for technical training. The faculty explained how simulation-based learning helps students understand robotics fundamentals before transitioning to hardware-based implementation.

Following this, the delegation visited a **classroom session**, where they interacted with Japanese students and observed their lab-based curriculum structure. This helped the MITS students understand Japan's practical and application-driven approach to engineering education.

The next stop was the **Robotics Laboratory**, where students explored humanoid robots, manipulator arms, grippers, microcontroller units, and embedded automation systems. The sessions highlighted Japan's technological advancements in robotics education and gave the delegation practical insights into real-world robotic design.

Lunch was served in the college canteen, where the students enjoyed a **vegetarian noodles bowl.** After lunch, the team visited the **Computer Architecture Laboratory**, where they were introduced to system-level hardware concepts, processor design modules, memory organization, and performance analysis tools. Students also completed an **assignment on Moodle**, applying the concepts explained during the session.





The day concluded with the delegation returning to their respective guest houses. After dinner, some participants visited a nearby store to purchase vegetables and essential items, providing them a glimpse into daily life in Ichinoseki.

5. Day 4: 20th November 2025 - Industrial Visit to Murakomi Group, Chūson-ji Temple, and Mochi Festival

The fourth day of the program involved a full-day academic–industrial exposure combined with rich cultural experiences. The delegation left the guest houses at **7:50 AM JST** and reached **NIT Ichinoseki College by 8:30 AM JST**, where they were welcomed by **Prof. Yoko** and briefed about the industrial visit schedule.

At **8:40 AM JST**, the college arranged a dedicated van for the visit, and the team departed for the **Murakomi Group**, a renowned company engaged in automotive manufacturing, EV components, precision engineering, and industrial innovation. The delegation arrived at **8:54 AM JST**, where they were welcomed into the boardroom.

A technical presentation by the Murakomi chief was held from **10:02 AM to 10:32 AM JST**, providing insights into the organization's technological expertise, manufacturing capabilities, research areas, and

contributions to Japan's automotive sector. The session covered EV manufacturing, autonomous technology, drone-based transport systems, and integrated mobility solutions.

From **10:35 AM JST**, the delegation visited the company's EV exhibition area, which included:

- Educational EV models
- Agricultural drones
- "Heli Doctor" emergency response drone system
- Drone-car hybrid vehicle
- Production vehicle prototypes

This was followed by a detailed **production unit tour** from **10:35 AM to 11:50 AM JST**, where the participants observed machining, assembly lines, QC testing areas, and automated production setups. The visit offered students a rare opportunity to see Japan's industrial precision and efficiency up close.

The team formally thanked the Murakomi chief at **11:52 AM JST** before departing for the next activity.

Cultural Visit: Chūson-ji Temple

After the industrial visit, the delegation traveled to the historic **Chūson-ji Temple**, a UNESCO World Heritage Site. They departed at **11:53 AM JST** and arrived at the temple area around midday.

A team lunch break was taken from **1:10 PM to 1:42 PM JST**, after which the delegation continued exploring the temple complex until **3:10 PM JST**. Students learned about the temple's cultural significance, Japanese architecture, and historical evolution.


Mochi Festival Participation

At **3:15 PM JST**, the team proceeded to the Mochi Festival venue, an important cultural event symbolizing gratitude, community bonding, and celebration in Japanese tradition. The festival formally began at **4:00 PM JST**.

During the event:

- MITS and NIT Ichinoseki students interacted informally
- A fun session involving **Indian movie dialogues** took place at **4:30 PM JST**
- MITS students gave a **presentation on Indian culture, festivals, and traditions**, which received enthusiastic appreciation
- Ms. Hema showcased a dance video ("Ashv dance video"), adding a cultural highlight to the evening
- A group photo session was held with all Sakura team members
- A vote of thanks was delivered to the event organizers

The day concluded with the delegation returning to the guest houses at **6:25 PM JST**, marking an academically enriching and culturally vibrant day.

6. Day 5: 21st November 2025 - Meeting with President, Internship Collaboration, Student Presentations & Campus Tour

The fifth day of the Sakura Science Exchange Program focused on academic collaboration, institutional partnership discussions, and student-led presentations. The delegation left the guest houses at **7:50 AM JST** and reached **NIT Ichinoseki College by 8:27 AM JST**. They were welcomed by **Prof. Yoko Tominaga**, who guided them to the designated workspace for the day.

At **8:45 AM JST**, the team settled into the working area to prepare for their scheduled sessions. The most significant engagement of the day was the meeting with **President Dr. Junya Kobayashi**, held from **9:10 AM to 9:40 AM JST**. During this meeting, the President expressed appreciation for the participation of MITS in the Sakura Science Program and discussed future collaborative opportunities.

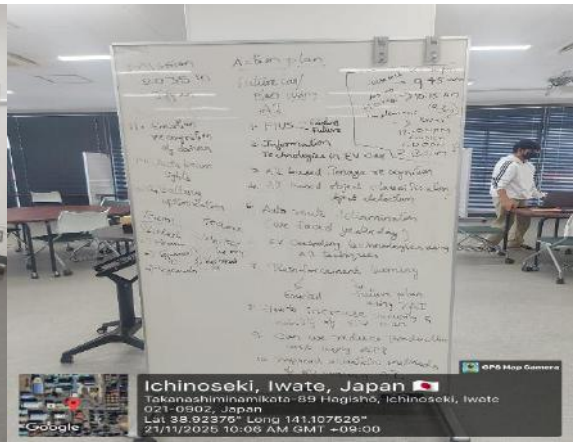
Key Collaboration Outcomes Finalized During the Meeting:

1. **Internship Acceptance for MITS Students (2026):**
   NIT Ichinoseki College agreed to host **two MITS students** for a **two-month offline internship** in 2026. (The 2025 slots were already filled.)
2. **Japanese Delegation to MITS:**
   NIT Ichinoseki expressed willingness to send **two Japanese students and one faculty member** to MITS for an academic exchange program.
3. **Long-Term Collaboration:**
   Both institutions agreed to continue academic cooperation beyond the Sakura Science Program, potentially in research, student projects, and faculty exchange.

After the meeting, the delegation returned to their working space at **9:45 AM JST** to prepare for the final presentations. **Two teams** were organized:

Team 1

- Lokesh Ayyaswamy
- Hema Charitha Kodanda
- Tejasree Kothapalli
- Tejeswar Reddy Meegada



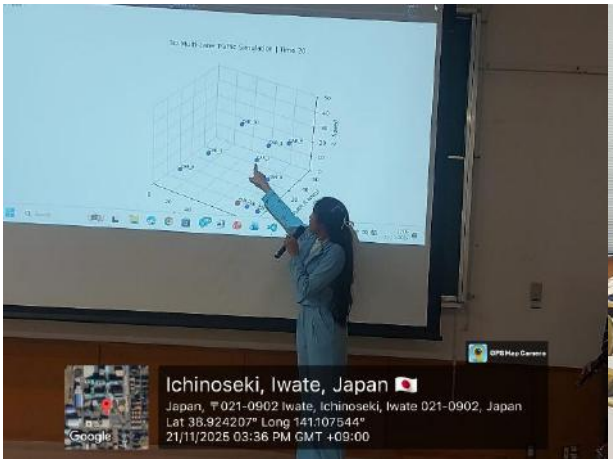
Team 2

- Aniket Arun Sasmal
- Chershitha Reddy Chapati
- Vyshnavi Sarode

Each team was assigned specific components of the presentation focusing on their learnings and project-related insights under the **AI × EV International Co-Creation Project**.

The participants worked on structuring slides, refining content, and preparing the final outcome documentation. At **12:30 PM JST**, the team took a lunch break and resumed work at **1:00 PM JST**.

By **2:00 PM JST**, both teams presented their draft versions for review. After feedback and final corrections, the **official student presentations** began at **3:00 PM JST** and continued until **3:45 PM JST**. The presentations were well-received by Japanese faculty, who appreciated the clarity, teamwork, and depth of understanding demonstrated by the students.



Immediately after the presentations, a **certificate distribution ceremony** was held from **3:45 PM to 4:00 PM JST**, where all participants received certificates of completion under the Sakura Science Exchange Program.

Following the ceremony, the delegation went on a **campus tour** from **4:00 PM to 4:45 PM JST**, visiting key laboratories, student innovation spaces, and campus facilities. The day ended with the team returning to the guest houses at **4:50 PM JST**.

7. Day 6: 22nd November 2025 - Departure from Ichinoseki, Bullet Train to Tokyo & Visit to Mori Digital Art Museum

The sixth day marked the transition from the academic schedule at NIT Ichinoseki College to the concluding cultural activities planned in Tokyo. The delegation checked out of their guest houses at **8:30 AM JST** after expressing gratitude to their respective host families **Ishi-san and Miyuki-san** for the boys' group, and **Oikawa-san and Yokou-san** for the girls' group. Their warm hospitality throughout the stay created a memorable cultural connection for the entire team.

The delegation reached **Ichinoseki Station at 9:00 AM JST**. A brief send-off was given by members of the Sakura Science Program team at **9:10 AM JST**, marking the conclusion of the academic component of the exchange. At **9:30 AM JST**, the team boarded the **Shinkansen (Bullet Train)** bound for Tokyo. The high-speed journey offered scenic views of the Iwate region, allowing the delegation to reflect on their enriching academic and cultural experiences. The train arrived at **Tokyo Station at 12:02 PM JST**.

From Tokyo Station, the team traveled to **Minato City** between **12:02 PM and 1:00 PM JST**, using local Tokyo transit. This was followed by a planned visit to one of Japan's well-known digital art attractions the **Mori Art Building Digital Art Museum** from **1:00 PM to 3:00 PM JST**. The museum offered immersive, interactive digital installations featuring light art, motion-sensing visuals, creativity walls, and spatial-motion exhibits. This visit provided students with a unique blend of technology and artistic expression, showcasing Japan's leadership in digital creativity.

After the museum visit, the team commenced their journey toward **Narita International Airport** between **3:00 PM and 4:30 PM JST**. Upon reaching the airport, the delegation proceeded to the hotel shuttle zone and boarded the **MyHomeStay Hotel** bus service. They checked in at **5:00 PM JST**, concluding the day's travel and cultural activities.

The evening was spent resting and preparing for the return journey scheduled for the next morning.

8. Day 7: 23rd November 2025 - Final Day – Return to India

The final day of the Sakura Science Exchange Program began early, with the delegation checking out of **MyHomeStay Hotel at 7:30 AM JST**. The hotel arranged a shuttle bus service for airport transfer, and the team reached **Narita International Airport, Terminal 1, at 7:50 AM JST**.

Upon arrival, the delegation completed **self-check-in** at **8:20 AM JST**, followed by baggage drop and security procedures. Boarding passes and luggage tags were issued by **8:45 AM JST**. The team then proceeded to immigration at **9:00 AM JST**, which was completed smoothly.

The delegation arrived at **Gate 33** at **9:30 AM JST** for boarding **Singapore Airlines (Group 6)**. The flight **SQ637** departed from Narita to Singapore at **10:00 AM JST**, marking the beginning of the return journey.

After a comfortable flight, the team arrived at **Singapore Changi Airport (Terminal 3) at 4:00 PM SGT**. During the transit period, students explored the airport's facilities and used the **Skytrain** to travel between **T3 → T1 → T3** from **4:00 PM to 5:00 PM SGT**, experiencing one of the world's most advanced airport transit systems.

By **5:00 PM SGT**, the team arrived at **Gate A1** in Terminal 3 for the final leg of the journey. Boarding began at **7:00 PM SGT**, and all security and gate formalities were completed by **7:36 PM SGT**. The flight **SQ510** departed at **8:00 PM SGT** from Singapore to Bengaluru.

The delegation arrived at **Kempegowda International Airport, Bengaluru (Terminal 2) at 10:10 PM IST**. After deboarding, the team proceeded through immigration, which was completed by **10:40 PM IST**, followed by luggage collection.

Outside the arrival gate, parents and college representatives welcomed the students. The delegation departed from Bangalore Airport at **11:28 PM IST** in the college-arranged vehicle and reached **Angallu at 1:40 AM IST** on 24 November 2025, safely completing the international exchange journey.

This marked the successful conclusion of the Sakura Science Exchange Program, filled with academic enrichment, cultural understanding, international collaboration, and unforgettable experiences.

Key Learnings (Academic, Technical & Cultural Learning):

The Sakura Science Exchange Program provided the MITS delegation with a multi-dimensional learning experience that combined advanced engineering exposure, international academic collaboration, and rich cultural immersion. The following are the key learnings derived from the program:

1. Technical Learning in Robotics and EV Systems
2. Understanding the AI × EV International Co-Creation Project
3. Exposure to Japanese Engineering Pedagogy
4. Industrial Learning from Murakomi Group
5. Cultural Awareness and Global Competence
6. Communication, Teamwork & Presentation Skills
7. Personal Growth and International Exposure

Overall, the program fostered a holistic blend of technical capability, academic enrichment, global mindset, and cultural appreciation, key competencies for global engineers.

Program Outcomes:

The participation of MITS in the Sakura Science Exchange Program resulted in several significant outcomes that contribute to the academic advancement of students and strengthen international collaborations.

1. Internship Collaboration Finalized
2. Exchange Opportunity for Japanese Students and Faculty
3. Strengthened Institutional Partnership
4. Enhanced Student Competence and Employability
5. Cultural Exchange and Internationalization of Education
6. Documentation and Knowledge Transfer
7. Visibility for MITS on International Platforms

The program successfully achieved academic, cultural, and institutional objectives, creating a strong foundation for long-term collaboration between MITS and NIT Ichinoseki College, Japan.

Sustainable Development Goals (SDGs) Mapping

The Sakura Science Exchange Program aligns closely with several **United Nations Sustainable Development Goals (SDGs)**. The academic activities, cultural exchange, international collaboration, and technological learning gained through this visit contribute meaningfully to global development priorities. The following SDG mappings reflect how the program supports long-term sustainable growth and international education.

1. SDG 4: Quality Education - Global STEM learning, lab exposure
2. SDG 7: Affordable and Clean Energy - EV knowledge, sustainable mobility
3. SDG 9: Industry, Innovation, and Infrastructure - Industrial visit, robotics, manufacturing
4. SDG 11: Sustainable Cities and Communities - Autonomous driving insights

5. SDG 17: Partnerships for the Goals - Long-term Indo-Japan collaboration

The Sakura Science Exchange Program contributes to multiple SDGs by empowering students with technological skills, enhancing global partnerships, and promoting sustainable innovation in mobility, energy, and engineering education.

Conclusion

The Sakura Science Exchange Program at NIT Ichinoseki College, Japan, provided the MITS delegation with a valuable international learning experience. Through hands-on sessions in robotics, electric vehicles, and AI-driven mobility, along with industry visits and cultural activities, the students gained meaningful academic exposure and global awareness. The interactions with Japanese faculty, students, and host families strengthened cross-cultural understanding and enriched their overall learning.

The program also opened new avenues for future collaboration, including internship opportunities and student–faculty exchange between MITS and NIT Ichinoseki. Overall, the visit was highly impactful, enhancing technical skills, personal growth, and institutional partnership, while inspiring students to pursue innovative and globally relevant careers.