



# REPORT

## STEM AND CULTURAL CAMP 2025

with Guizhou Light Industry Polytechnic University,  
People's Republic of China

from 27 October to 8 November 2025

At Rajamangala University of Technology Lanna , Chiang Mai, Thailand

By  
**Office of International Relations, RMUTL**





# Executive Summary



## Brief overview of students performance

The STEM and Cultural Camp 2025 provided participating students with meaningful cultural, academic, and skill-based learning experiences throughout their 13-day program in Chiang Mai. Overall student performance was strong, with participants actively engaging in Thai language, cultural activities, STEM workshops, and Design Thinking sessions. Students demonstrated enthusiasm, adaptability, and steady improvement in communication, teamwork, creativity, and problem-solving skills.



## Major milestones achieved

### 01 Cultural & Language Integration

Students used basic Thai in real situations, including greetings, self-introductions, simple writing, and daily conversations such as ordering food. Their involvement in activities like Som Tam making, Ramwong dance, Thai arts, and Thai cooking further strengthened their understanding of Thai traditions and everyday culture.

### 02 Development of STEM and 21<sup>st</sup> Century Skill

Students completed STEM challenges like krathong design and hologram building, applying physics and optical concepts. Through Design Thinking activities, they practiced empathy, idea generation, prototyping, and teamwork, strengthening core 21<sup>st</sup> Century Skill.

# Thai Culture and Thai Language

## Summary

Thai Culture and Language Class Outcomes  
The STEM and Cultural Camp 2025 provided students with a vibrant immersion into Thai culture and language, offering a unique opportunity to deepen their understanding and appreciation of this rich cultural heritage. The camp included a variety of engaging activities designed to introduce students to the basics of the Thai language and cultural practices.



## Activities

- Practicing Thai handwriting to learn and apply Thai script, helping improve reading and writing ability.
- Learning self-introduction in Thai as a basic communication skill that builds confidence in daily interactions.
- Studying essential Thai vocabulary, including greetings, expressing thanks, ordering food, bargaining, describing food flavors, and identifying Thai menu items.



- Making Som Tam and learning the Ramwong dance to experience Thai culture through hands-on culinary and traditional performance activities.

## Outcome



The camp successfully equipped students with practical Thai language skills and cultural knowledge, which they were able to apply in their daily lives. Follow-up observations highlighted that students confidently used Thai for self-introductions in other classes and could order food and purchase items using basic Thai. This experience not only enriched their linguistic capabilities but also fostered a greater cultural appreciation, bridging gaps and building connections through language and shared cultural experiences.



# Thai Art

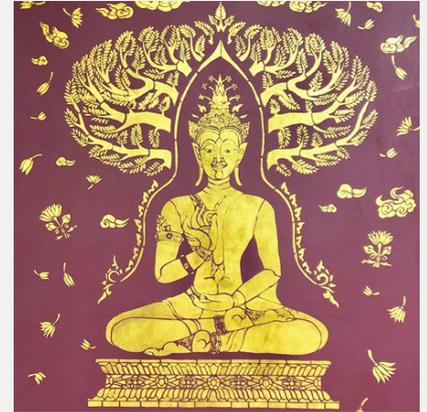
## Summary

The Thai Arts session offered students a meaningful introduction to traditional Thai artistic expression. Through guided demonstrations and hands-on practice, students explored the cultural significance of Thai art and learned the techniques behind lai kham patterns and coloring. By creating their own artwork, participants gained a deeper appreciation of Thai aesthetics and developed practical skills they can carry forward into future learning experiences.



## Activities

- Understanding Thai art by exploring the meaning and cultural significance of traditional Thai artistic forms.
- Learning Lai Kham techniques through demonstrations of classic patterns and coloring methods.
- Creating artwork by applying the learned techniques to produce individual Thai art pieces.



## Outcome

Students gained a deeper understanding of Thai artistic concepts through both guided instruction and hands-on practice. By creating their own artwork using traditional techniques, they not only strengthened their creative skills but also built confidence in applying these methods independently. The experience equipped them with practical abilities and cultural insights that can be applied in future academic projects, artistic work, or intercultural learning.

# Thai Cooking Class



## Summary

The students were welcomed with fresh coconut juice before beginning their Thai cooking experience. They learned to prepare Hor Mok Talay Ma Prow On (steamed seafood curry in young coconut) as the main dish, followed by Tub Tim Grob Ma Prow On (water chestnut in coconut milk) as the dessert. RMUTL invited a master chef in Thai cuisine to guide the session, teaching each step clearly and ensuring students could follow along with confidence. The students enjoyed the hands-on cooking activities and later shared the dishes they prepared together as their lunch, creating a memorable and enjoyable cultural experience.

## Menu



Hor Mok Talay Ma Prow On



Tub Tim Grob Ma Prow On



Thai Tea

## Activities

- Learning to prepare Thai dishes (Hor Mok Talay Ma Prow On, stir-fried vegetables, and Thai-style omelet) through step-by-step guidance from a master chef.
- Practicing each stage of the recipe under close supervision to build confidence in basic Thai cooking techniques.
- Learning to make water chestnut in coconut milk, with the chef demonstrating the dessert preparation before allowing students to recreate it independently.

## Outcome

Students gained hands-on experience preparing traditional Thai dishes and developed a better understanding of Thai culinary culture. With guidance from a master chef, they built confidence in basic Thai cooking techniques and enjoyed sharing the dishes they made together.

# Cross Culture Communication

## Summary

The Cross-Cultural Communication Workshop focused on helping students understand how cultural backgrounds influence communication styles and interactions. Through interactive activities, students examined differences in communication norms, values, and behaviors across cultures, including how people express emotions, show respect, and build relationships.

Group activities—such as cross-cultural scenario discussions, message-passing games, and reflection exercises—allowed students to practice effective communication strategies, improve their ability to interpret non-verbal cues, and develop greater empathy when engaging with individuals from diverse cultural contexts.

By the end of the workshop, students gained more confidence in navigating multicultural interactions and enhanced their understanding of how culture shapes communication in everyday situations.



## Activities

- Learning key concepts of cross-cultural communication.
- Discussing cultural differences and common causes of miscommunication.
- Playing the Whispering Game and Thai tongue twisters to enhance communication, speaking skills, and collaborative teamwork.

## Outcome

- Students learned key concepts of cross-cultural communication and how cultural backgrounds influence communication styles.
- They explored cultural differences, communication norms, and common causes of misunderstanding across cultures.
- Through interactive games, they practiced teamwork and intercultural cooperation.
- They developed the ability to identify and avoid common causes of cross-cultural misunderstanding.

# Design Thinking x 21<sup>st</sup> Century Skill

## Summary

Students practiced key 21<sup>st</sup> century skills through hands-on Design Thinking activities. They learned to understand user needs, define problems, brainstorm ideas, and create prototypes in groups. The session strengthened their communication, teamwork, creativity, and problem-solving abilities, while giving them confidence to apply Design Thinking in future learning and real-world situations.



## Design Thinking Activities

- **Empathizing:** Observation of user behavior using the POEMS framework (People, Objects, Environments, Messages, Services) and creation of an emotional journey map to understand experiences and identify pain points.
- **Ideation:** Brainstorming, clustering, and organization of ideas to generate potential solutions for enhancing customer satisfaction.
- **Prototyping:** Development of tangible prototypes to visualize and test possible improvements.
- **Reflection and Conclusion:** Reflection on learnings, summarization of insights, and evaluation of solutions while strengthening problem-solving, teamwork, and creative skills.



## Outcome

Students enhanced their communication, teamwork, creativity, and problem-solving skills through hands-on Design Thinking activities. They learned to identify customer needs, generate and organize ideas, develop tangible prototypes, and present their solutions with confidence. As a result, students gained practical experience in addressing real-world challenges and improving customer satisfaction.

# STEM

## Summary

Students applied physics and optical principles through hands-on activities. They designed and built krathongs that could float, move, and stay balanced, explaining concepts such as buoyancy, weight distribution, and water resistance. They also learned about Pepper's Ghost and the basics of holograms before creating their own simple hologram models. These activities strengthened their creativity, teamwork, and problem-solving skills while helping them apply STEM concepts in practical and engaging ways.



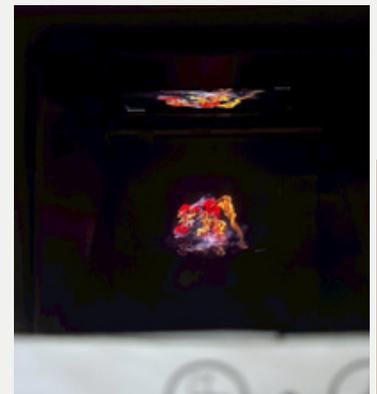
## STEM: Krathong Activity

- Designing and making a krathong using basic physics principles.
- Aiming to create a krathong that could float, move efficiently, and remain stable without sinking.
- Explaining the mechanics of the design, including buoyancy, balance, weight distribution, and water resistance.
- Encouraging creative problem-solving and the practical application of STEM concepts.



## STEM: Hologram Activity

- Learning about the history and concept of Pepper's Ghost, a classic optical illusion technique.
- Studying the fundamentals of holograms and how light, reflection, and angles create visual effects.
- Designing and creating simple hologram models through group collaboration.
- Applying physics and optical principles while strengthening creativity and teamwork.



## Outcome

Students gained a stronger understanding of physics and optical principles through practical, hands-on challenges. They demonstrated the ability to apply STEM knowledge by designing functional krathongs and creating simple hologram models. The activities improved their creativity, teamwork, and analytical thinking, while building confidence in experimenting, explaining scientific concepts, and solving problems collaboratively.

# Field Trips

Students explored key cultural and historical sites in Chiang Mai to deepen their understanding of local life, northern architecture, and important landmarks. They visited places such as Doi Suthep Temple, the Old City, Tha Phae Walking Street, and an elephant conservation area. Through these visits, students experienced Thai culture firsthand and improved their cross-cultural communication.

## Objectives of the Field Trips

- To help participants understand local Thai culture.
- To learn about the history and geography of Chiang Mai.
- To gain real-life experiences connected to Thai culture.

## Outcome: Knowledge and Skills Gained

- Students developed a deeper understanding of Thai culture.
- Students strengthened their cross-cultural communication skills through interactions during the trip.





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# Thank You

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