



25th INTERNATIONAL STUDENTS MULTIDISCIPLINARY DESIGN CAMP 2026 KOTA KINABALU, SABAH, MALAYSIA

INTRODUCTION



- This is a collaborative program initiated by the Innovation Center for Engineering Education (*i-CEE*) of Jeonbuk National University. It is an engineering-based program where students collaborate to develop design proposal, and finally be able to invent/design a prototype which could serve in addressing the various community concerns.
- This program currently involves participation from various international universities from Malaysia (Universiti Kebangsaan Malaysia + Universiti Malaysia Sabah), Indonesia (Bandung Institute of Technology, Universitas Muhammadiyah Surakarta + Institut Teknologi Sepuluh Nopember), Singapore (Nanyang Technological University), Taiwan (National Cheng Kung University), Vietnam (Hanoi University of Science and Technology, and South Korea (Consortium of 9 universities led by Jeonbuk National University + Chungnam National University).
- It is conducted in 2 stages where the first stage in February is usually organized in partnering countries such as Malaysia, Indonesia, Taiwan and Vietnam. The second stage is then organised in South Korea in August. For this event, all teams need to complete the prototype in about 6 to 8 months.

PARTNER UNIVERSITIES

INNOVATION CENTRE FOR ENGINEERING
EDUCATION, JEONBUK NATIONAL UNIVERSITY,
JEONJU, SOUTH KOREA.

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UNIVERSITI KEBANGSAAN MALAYSIA
INSTITUT TEKNOLOGI BANDUNG
NANYANG TECHNOLOGICAL UNIVERSITY
NATIONAL CHENG KUNG UNIVERSITY
HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITAS MUHAMMADIYAH SURAKARTA
INSTITUT TEKNOLOGI SEPULUH NOPEMBER
UNIVERSITI MALAYSIA SABAH

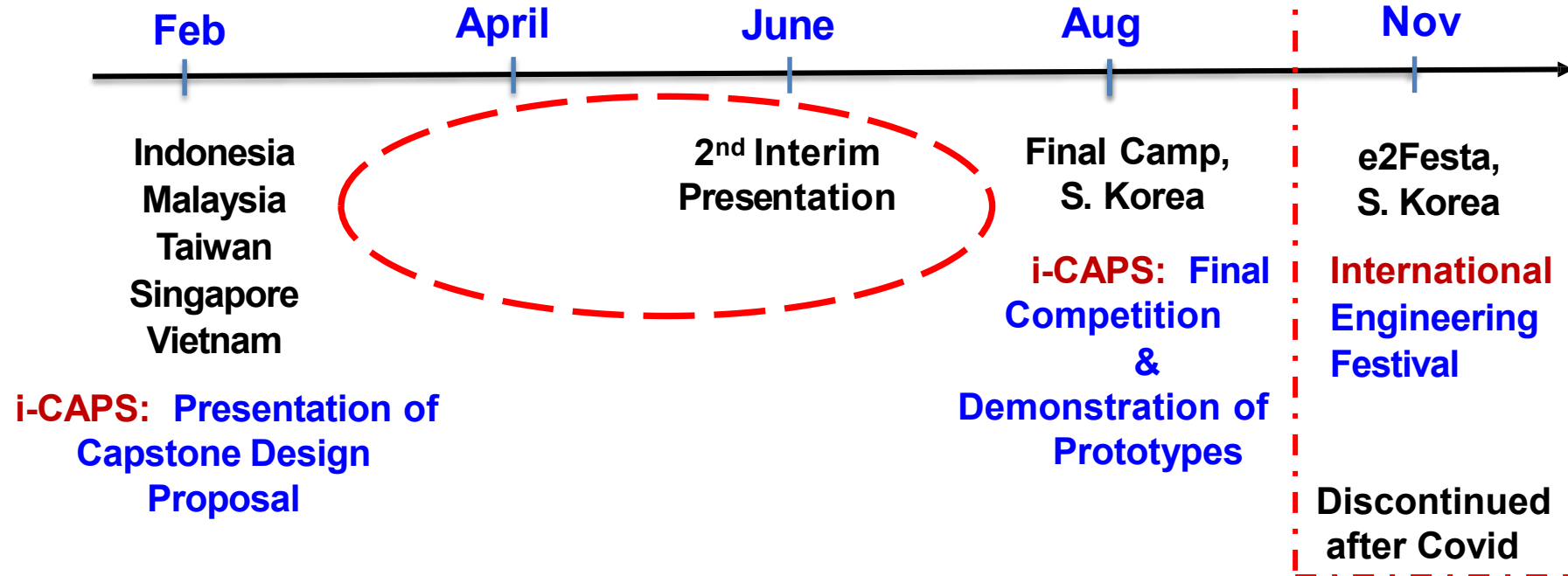


INTRODUCTION



- **Capstone Design**
- Build an online platform for capstone design
- Capstone Design Establishment of a system to reflect the demand of new industries
- Capstone design operation (industry-academia cooperation and multidisciplinary) and spread of industry-centered evaluation system
- Commercialization of capstone design and support for participation in external competitions (follow-up management)

PROGRAM PLANNING



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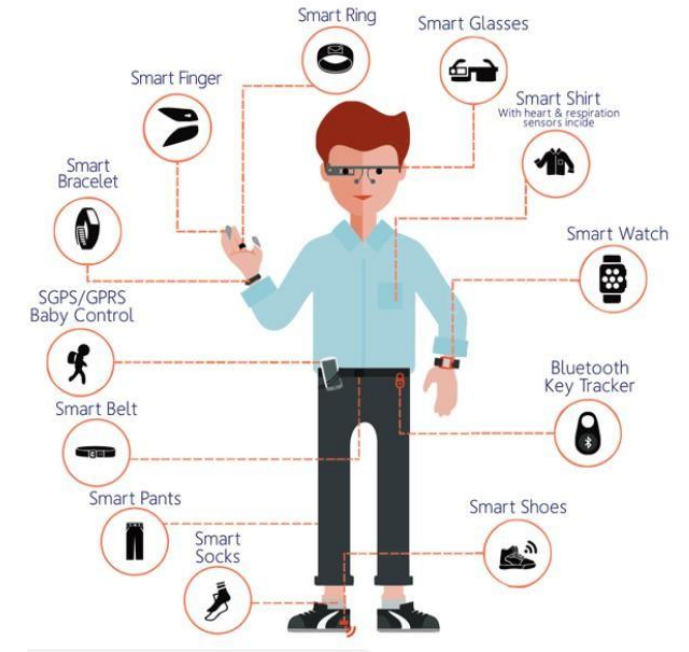
Event Workshop

(Various activities were held including visits and seminars to design + research facilities of leading Korean companies such as Samsung and so on.)

- Design workshop are conducted where students are exposed to group work (critical collaboration work) to complete a design proposal and solution based on a specific theme.
- Students' preparation of their product in workshop to finalize their respective prototypes before the competition day.

Event Day

- Each group will then present their final design proposal and completed prototypes to a team of professors and jurors.



IMPACT

- Foster students' talents to think creatively and innovatively and have strong competitiveness as well as prepare students towards the Industrial Revolution 4.0.
- Train students to be tolerant and communicate effectively with foreign students who have different cultures and languages.
- Produce innovative prototypes and meet the latest technological features that can be proposed for commercial use and able to benefit the community as well as increase the living value of the community.

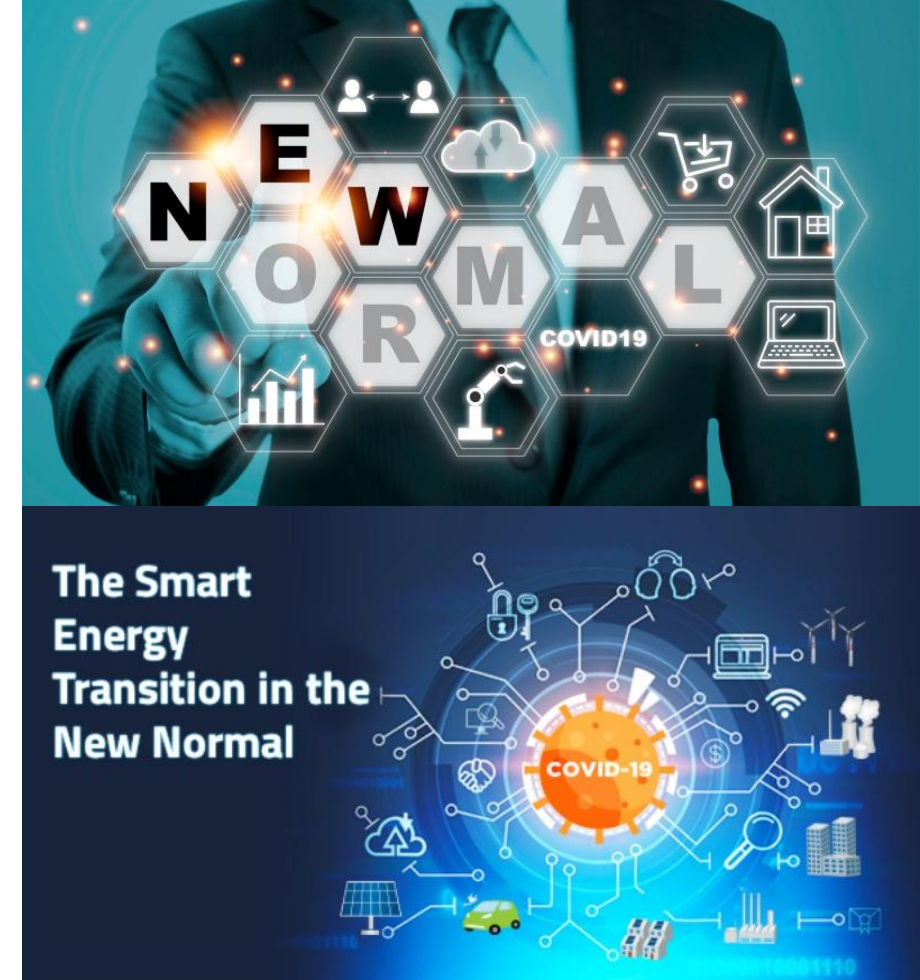


i-CAPS THEME 2026

Theme – *Tech Start up for Small Businesses*

Project Guidelines (students are to incorporate the use of)

- Convergent technologies: IoT, Sensor, Aduino, 3D Printing, SNS, Internet App, drone, and so on.
- OUTCOME : Environment-friendly virtual & scaled prototype models



INTRODUCTION

- The ICAPS / Capstone Design Camp is an annual international collaborative program that brings together multidisciplinary student teams from participating universities to design innovative, technology-driven solutions addressing real-world challenges.
- For the 2026 edition, the theme “**Tech Start-up for Small Businesses**” focuses on empowering local entrepreneurs and micro-enterprises through creative technology applications and entrepreneurial innovation.

PROJECT THEME OVERVIEW

- Small businesses are the backbone of local economies but often face challenges in adopting digital tools, automation, and online platforms.

This year's theme encourages participants to:

- Develop **simple, affordable tech solutions** that address real problems faced by small business owners.
- Blend **creativity, business sense, and technology** to turn ideas into viable start-ups.
- Emphasize **sustainability, inclusivity, and practicality** within their proposed solutions.

PROJECT SCOPE AND FOCUS AREAS

- Teams may focus on (but are not limited to) the following:
-  **Digital Tools for SMEs:** Inventory management, e-commerce, POS, or accounting solutions.
-  **Mobile Apps:** Apps that connect small vendors with customers or suppliers.
-  **Sustainable Business Tech:** Green packaging innovations, eco-friendly production aids, or energy tracking.
-  **Low-Cost Automation:** Tools to simplify production, packaging, or logistics.
-  **AI & Data for Small Business:** Predicting trends, managing customers, or optimizing sales.

LEARNING OBJECTIVES

- Participants will:
- Apply **design thinking and engineering principles** to develop feasible solutions.
- Experience **cross-cultural teamwork** and interdisciplinary collaboration.
- Learn to transform ideas into **prototype-level tech start-up concepts**.
- Strengthen skills in **pitching, presentation, and entrepreneurial communication**.

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SCHEDULE 2026

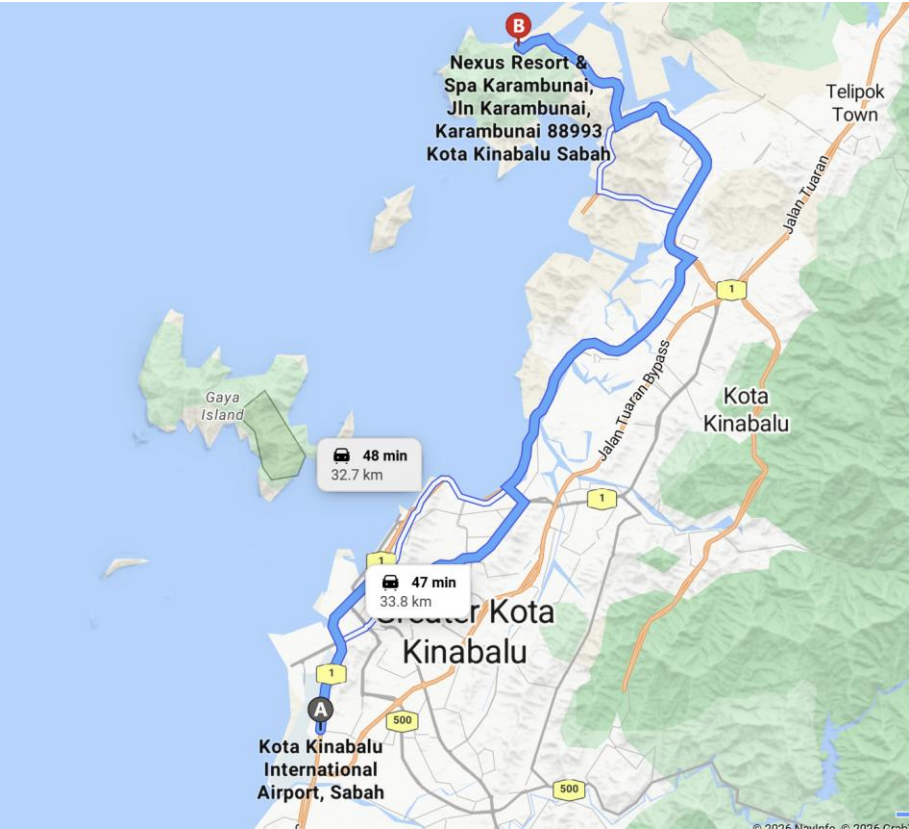
Time	Feb 1 (Sun)	Feb 2 (Mon)	Feb 3 (Tue)	Feb 4 (Wed)	Feb 5 (Thu)	Feb 6 (Fri)	Feb 7 (Sat)
07:30~09:00	Arrival (Kota Kinabalu International Airport)	Arrival (Kota Kinabalu International Airport)	Breakfast				
09:00~12:00			Community Outreach (Kundasang)	i-CAPS Team Meeting	Faculty Meeting	i-CAPS Team Meeting	Cultural Tour (Kota Kinabalu)
12:00~13:30		Lunch					
13:30~17:00		Opening Ceremony	Community Outreach (Kundasang)	i-CAPS Team Meeting	i-CAPS 2026 Presentation + Evaluation		
		ICE-breaking					
		Special Lecture					
17:00~18:30		Dinner				Closing Ceremony + Banquet Dinner	
18:30~20:00	i-CAPS Team Meeting	i-CAPS Team Meeting	i-CAPS Team Meeting				

VENUE & ACCOMMODATION



Nexus Resort & Spa Karambunai ★★★★★

Off Jalan Sepangar Bay, Locked Bag 100, Tuaran, Kota Kinabalu, Malaysia, 88993



Popular landmarks		
	Poring Hot Springs	14.5 km
	Signal Hill Observatory Platform	14.6 km
	Kota Kinabalu City Mosque	14.7 km
	Gaya Street Sunday Market	15.0 km
	Night Market	15.3 km
Closest landmarks		
	Nexus Resort & Spa Karambunai	120 m
	Hospital Angkatan Tentera Wila...	3.0 km
	Sepanggar Tunnel	6.2 km
	Tennis Court	6.3 km
	Pulau Sepangar	6.3 km

ASSESSMENT

Team Performance Evaluation

- Self-report assessment of a team's functioning to be monitored periodically during the life of a team.
- Several areas of assessment:
 - communication
 - task management
 - decision-making
 - conflict resolution
 - student's reflection

Target skills and competencies	Target achievements
Specialized Knowledge & Skills	
Engineering Design Capability (Problem Inquiry Capability, Communication Ability, Adaptability, Contribution to Teamwork)	Being able to conduct the i-CAPS related activities with high motivations, an ability to communicate in the local language, and the spirit of teamwork
Frontier Sprit (Clear Vision for Future Planning, Tractive Ability, Flexibility, Ability to develop/expand program/Leadership)	Being able to find information and alternative solutions to solve problems by applying their own expertise
Problem Solving Competencies (Creativity, Identity, Contribution to Society, Strong Mentality)	Being able to develop technology necessary for solving the i-CAPS related issues by engaging in the related study
Cross-Cultural Capability (Broad-mindedness, Tolerance, Cross-Cultural Understanding, Flexibility, Cooperativeness)	Being able to understand cross-cultural background and a wide range of cross-section issues, and to be able to share the i-CAPS related issues with local people in Asia

