

CUSE Newsletter

A semiannual newsletter of Regional Centre for Manufacturing Systems Engineering, Chulalongkorn University
(Chula Systems Engineering - CUSE)

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Message from the Director

Celebrating 30 Years of CUSE: Shaping the Future of Engineering Management

Dear CUSE Community – Students, Alumni, and Supporters,

As Director of CUSE, I am proud to announce a significant milestone: our 30th anniversary! For three decades, the Chulalongkorn University's Regional Center for Manufacturing Systems Engineering has stood as a beacon of postgraduate education and research in engineering management and manufacturing systems, impacting not only Thailand but also the wider region.

Established in May 1995 in close collaboration with Warwick Manufacturing Group, University of Warwick, CUSE has provided a unique dual-degree programme, awarding graduates a Master of Science from Warwick and a Master of Engineering from Chulalongkorn University. Our programmes in Engineering Business Management and Supply Chain & Logistics Management, as well as Service Management & Design, have equipped hundreds of professionals with the advanced skills and knowledge to thrive in a dynamic global landscape.

We are very proud of the contributions our alumni have made to the industrial and economic development of Thailand and its neighbouring countries. Their successes are a testament to the rigorous education and practical experience they gained at CUSE.

This 30th anniversary is a celebration of our shared journey and a reflection on our achievements, thanks to the dedication of our faculty, the brilliance of our students, and the unwavering support of our alumni and partners. We invite you to join us in celebrating this milestone and look forward to the exciting future we will build together for many years to come.

Sincerely,

Associate Professor Chuvej Chansa-ngavej, PhD
Director

Chulalongkorn University's Regional Centre for Manufacturing Systems Engineering (CUSE)



In conversation with **Ms. Fonthip Poblarp**



Head of Internal Audit, Kasikorn X Company Limited

Driven by my ambition for a rigorous academic program, the CUSE dual degree program is the ideal choice. It combines WMG's world-class course works with thesis opportunities under highly regarded professors at Chulalongkorn University.

In particular, the Engineering Business Management (EBM) curriculum—focusing on technology and innovation management—has enhanced my skills in working at tech companies—as it allows me to better comprehend how to design effective products and services, as well as how to assess risks related to such designs. Frankly speaking, the blended knowledge between academic and practical viewpoints, provided by this program, is invaluable for my professional growth.

Besides knowledge, this program also offers an international learning atmosphere, with classmates from diverse backgrounds, together with an opportunity to attend modules in Hong Kong and Singapore that, in turn, broadens my global perspective.

As a concluding remark, I am really grateful for module tutors, professors at Chulalongkorn University, my thesis advisor, and seamless student support from both institutions, that keep me fully engaged.

Major Changes in Our Program

We would like to announce some major changes in our program starting on the 2025 Academic Year.

First of all, there will be a reduction in the number of modules required for graduation at both WMG and CU for the CUSE dual degree program. To be precise, the students enrolled in the dual degree program from AY2025 onward will need only **9 modules (from 12 modules)** for their graduation.

Furthermore, the title of MS awarded by WMG will also be changed to **“Engineering Business and Logistics Management”** to account for rapid changes in the current business settings that require a wider knowledge spectrum.

More importantly, senior students in any CU undergraduate programs will be allowed to enroll for WMG modules in the so-called integrated degree program setting (note: some requirements may be applied).

We expect that the current CU students and prospective students will be beneficial from all of the abovementioned changes.

Please stay tuned for further information, which will be made available on our CUSE website:

<https://cuse2.eng.chula.ac.th>

Commencement Ceremony

From October 2nd to 4th, 2024, Chulalongkorn University has held a commencement ceremony for students graduating in the 2023 Academic Year. In this academic year, the CUSE had 10 graduates and we would like to congratulate them on their success.



A name list of graduates:

1. Mr. Tanat Ngaorungsi
2. Ms. Punyavadee Srimongkol
3. Ms. Suphathida Rujithamrongkul
4. Mr. Rolf Guglielmana
5. Ms. Kanjanataj Chaowai
6. Ms. Fonthip Poblarp
7. Mr. Narongchon Amapat
8. Ms. Piyanoot Singhakachen
9. Mr. Khaza Newaz Muhammad
10. Ms. Chotika Khowcharoen

From the left to the right:

Row 1: Assoc. Prof. Sawekchai Tangaramvong (Associate Dean, Academic Affairs),
Assoc. Prof. Witaya Wannasuphoprasit (Dean),
Assoc. Prof. Chuvej Chansa-ngavej (CUSE Director)

Row 2: Mr. Tanat Ngaorungsi, Ms. Suphathida Rujithamrongkul, Ms. Punyavadee Srimongkol,
Ms. Fonthip Poblarp, Ms. Kanjanataj Chaowai, Mr. Narongchon Amapat

**Chula Ranks Top 16
in Asia
and
No. 1 in Thailand**



CU Rankings

Chulalongkorn University has been recognized in the 2025 QS Sustainability Rankings, earning the 16th spot in Asia and the 1st in Thailand. This achievement reflects the university's steadfast commitment to sustainable development and academic excellence, as assessed by the QS Sustainability Rankings. The QS Sustainability Rankings evaluate over 1,700 universities worldwide, focusing on their efforts to address critical environmental and social challenges. Universities are assessed across various dimensions, including Environmental Impact, Social Impact, Governance and other relevant performance metrics.

Chulalongkorn University's Achievements



as a sustainable university



Sustainability 2025

In the 2025 QS Sustainability Rankings, Chulalongkorn University scored an impressive 80.7 overall, showcasing excellence across multiple dimensions:

- **Environmental Sustainability:** Ranked 71st globally, highlighting impactful initiatives and robust sustainability policies.
- **Knowledge Exchange:** Ranked 135th globally, demonstrating excellence in sharing expertise and fostering collaborations.
- **Environmental Research:** Ranked 124th globally, reflecting excellent outcomes in sustainability, environmental education, and research.
- **Governance:** Ranked 176th globally, showcasing organizational efficiency and leadership.

Outstanding Performance Highlights

- **Equality:** Ranked 257th globally, emphasizing efforts to promote inclusivity and reduce disparities.
- **Social Impact:** Ranked 313th globally, underscoring leadership in fostering equity and knowledge exchange.

Source:

<https://www.chula.ac.th/en/news/207174/>

by Assoc.Prof. Pisit Jarumaneeroj, the Secretary of CUSE

Research Corner

The spectrum of human activities—including transportation, electricity generation, industrial production, agricultural, and energy consumption in residential and commercial buildings—has presented a substantial impact on the environment, especially the rising level of greenhouse gas (GHG) emissions that intensifies global warming. To better support the realization of sustainable development for future generations, it is imperative for people to be conscious of protecting the environment, considering the extensive effects of these activities.

Among such activities, transportation is undeniably a major contributor to air pollution and a significant producer of carbon dioxide (CO₂) emissions that continually aggravate global warming concerns. As such, proposals to reduce air pollutants and CO₂ emissions in the transportation sector have been widely initiated, including the promotion of eco-friendly electric vehicle (EV) usage.



Although the number of EV users in Thailand has increased tremendously over recent years, it still remains minimal compared to the number of internal combustion vehicle users. Moreover, some EV types have been available in the market for some time, but they have not been widely used until recently. These issues may be attributed to several factors (e.g., the acceptance of EV technology, decisions to purchase and use EVs, and policies that affect user decisions to purchase and use EVs). To better comprehend the dominance of such factors, especially in the emerging market, like Thailand, Assoc.Prof. Pisit Jarumaneeroj and his research team have devised a multi-perspective multi-criteria decision analysis (MCDA) framework and applied it to datasets of Thai EV users, including both general EV user and expert groups. Their results reveal that “Attitude Toward Using EVs” and “Subjective Norms” are crucial for the acceptance of EVs, while “Product and Service Attributes” and “Purchasing Incentive Policies” greatly impact the adoption decisions.

Those who are interested in this research paper may download the full paper via the following link without charges: <https://doi.org/10.1016/j.trip.2024.101229>

Identifying factors influencing electric vehicle adoption in an emerging market: The case of Thailand

Electric vehicles (EVs) are considered a technological innovation that helps reduce not only fuel consumption but also air pollution and greenhouse gases that exacerbate global warming concerns. Despite these benefits, the understanding of factors influencing EV adoption remains obscure, as it varies greatly across countries and perspectives (e.g., the acceptance of EV technology, decisions to purchase and use EVs, and policies that affect user decisions to purchase and use EVs). To better comprehend the dominance of such factors—especially in an emerging market with a huge leap in EV usage, like Thailand—we devise a multi-perspective multi-criteria decision analysis (MCDA) framework and apply it to datasets of Thai EV users, including both general EV user and expert groups. Our results reveal that “Attitude Toward Using EVs” and “Subjective Norms” are crucial for the acceptance of EVs, while “Product and Service Attributes” and “Purchasing Incentive Policies” greatly impact the adoption decisions. Besides these factors, we also identify causal-effect relationships among factors in each of these three different perspectives. This research thus allows stakeholders—including EV manufacturers, transport authorities, and governments—to properly devise relevant mechanisms supporting countrywide EV adoption in a more sustainable fashion.

Motto

Those who could think would thrive over those who could do.

Engineers, though, had better strive for both, i.e. Think - and do - as well.

Professor Phra Charoen Wisawakam

Longest-serving Dean of Engineering, Chulalongkorn University (from 11 June 1929 to 18 June 1961)