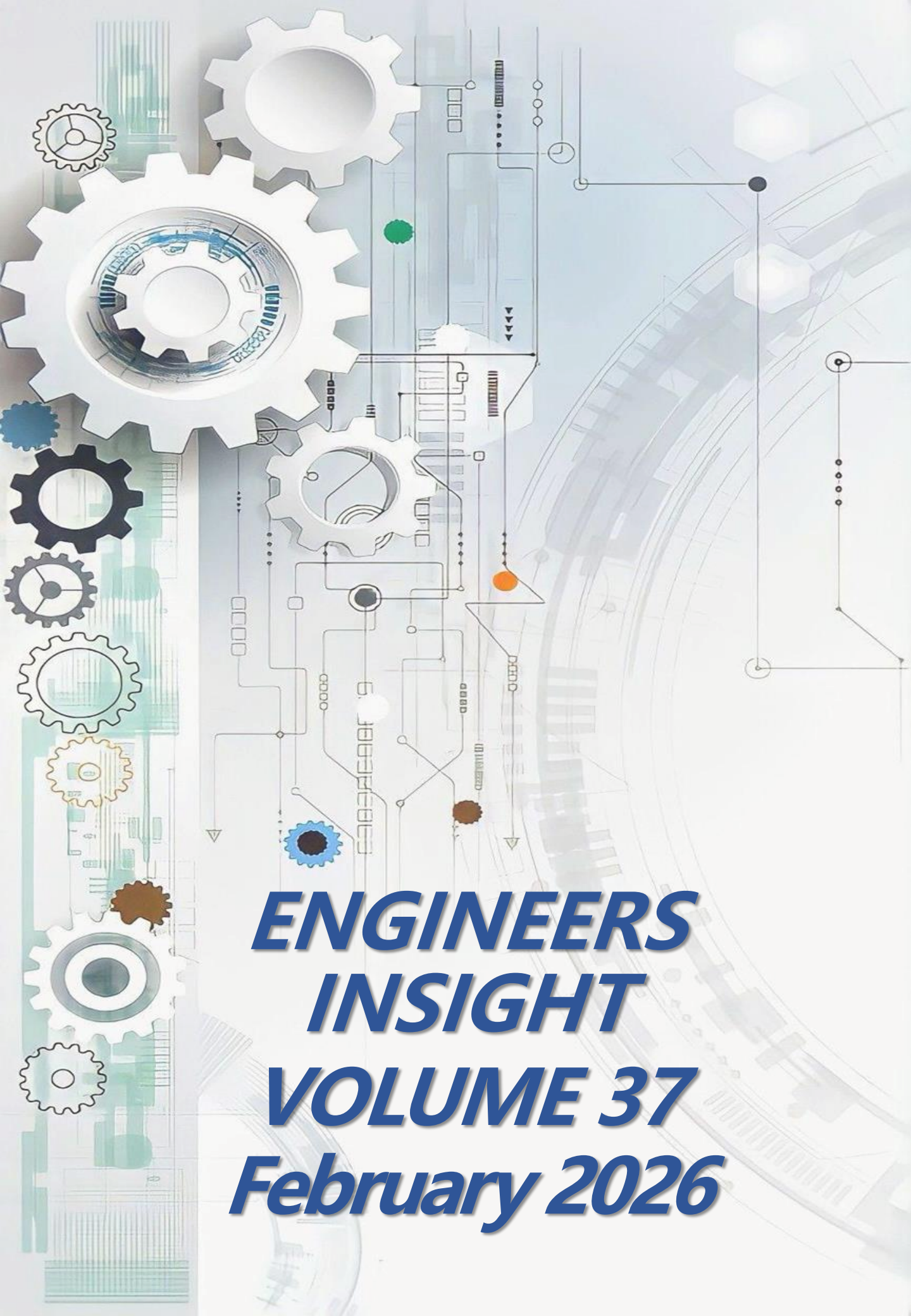

ENGINEERS INSIGHT

VOLUME 37
February 2026

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AWARDS & ACHIEVEMENTS

APU Named Malaysia's Best University for AI Excellence at Private Education Excellence Awards 2025

Asia Pacific University secures six accolades at **National Education Awards**, reaffirming its leadership in AI education and private higher learning.

The Private Education Excellence Awards 2025 winners, together with academic staff from APU (L–R): Prof Dr Mohammad Falahat, Prof Ts Dr Murali Raman, Ir Ts Dr Yvette Shaan-Li Susiapan, Prof Dr Ho Chin Kuan, Ir Eur Ing Ts Dr Harvin Kaur Gurchran Singh, Ir Ts Dr Alexander Chee Hon Cheong, and Asst Prof Ir Eur Ing Ts Dr Lau Chee Yong, celebrating their moment in the spotlight

Asia Pacific University of Technology & Innovation (APU) has once again emerged as a trailblazer in higher education, clinching six prestigious honours at the **Private Education Excellence Awards 2025**.

Most notably, APU was conferred the **Malaysia's Best University for AI Excellence Award**, the event's highest institutional recognition, reaffirming its status as a national leader in artificial intelligence education and innovation.

This milestone marks the third consecutive year APU has dominated the **EDUCOOP Private Education Excellence Awards**, highlighting its continued commitment to quality, innovation, and industry relevance across academic disciplines.

The award ceremony was held at the **Mandarin Oriental Hotel** on 9 July 2025, attended by APU's academic and managerial staff, along with representatives from various educational institutions.

Prof Dr Ho Chin Kuan, Vice-Chancellor of APU (centre), celebrates the major win at the Private Education Excellence Awards 2025 with award recipients and members of APU's academic staff at the ceremony venue

APU's selection for the **AI Excellence Award** was driven by its comprehensive and integrated approach to AI education, blending curriculum innovation, industry engagement, student outcomes, and global recognition.

At the heart of this achievement lies an industry-aligned and dynamic curriculum, co-developed with leading technology companies including **Microsoft, AWS, IBM, Cisco, Huawei, SAS,** and **TIBCO**. The curriculum incorporates the latest developments in machine learning, robotics, computer vision, and generative models, ensuring that students receive a future-proof education.

As a **Premier Digital Tech Institution (PDTI)** under the **Malaysia Digital Economy Corporation (MDEC),** APU adopts a revolutionary approach by integrating AI technologies across all academic disciplines. From undergraduate to postgraduate levels, courses are infused with cutting-edge digital content, ensuring that every graduate emerges as a tech-savvy professional equipped for the demands of the digital economy.

APU further strengthens its AI education offering through hands-on learning experiences facilitated by state-of-the-art infrastructure, including **AI and cybersecurity** laboratories, **smart classrooms**, **VR suites,** and a **Cyber Security Talent Zone.**

These facilities mirror real-world environments and prepare students with practical skills required by industry.

The university's graduate employability outcomes are among the highest in the nation. APU consistently records a **100% employment rate** for its graduates, who also command competitive starting salaries. Its regular recognition as an "**Employer's Choice of University**" by **Talentbank** stands as testament to the strength of its graduate talent pool and the university's emphasis on both technical competencies and soft skills.

Academic and managerial staff of the APU family represent the institution at the Private Education Excellence Awards 2025 ceremony held at the Mandarin Oriental Hotel. (L-R) Dr Teh Choon Jin, Registrar and Senior Director of Administration; Prof Dr Angelina Yee, Director of Research Management; Prof Dr Andy Seddon, Senior Director of Partnerships & Standards; Prof Ts Dr Murali Raman, Deputy Vice-Chancellor; Prof Dr Ho Chin Kuan, Vice-Chancellor; Ar Jasmeet Pal Singh, Head of School of Architecture and Built Environment; Ms Supriya Singh, Director of Academic Operations; Mr Vijay Reddy, Senior Manager of Special Project; Prof Dr Kashif Hussain, Senior Head of School of Business and Global Hospitality and Tourism.

APU's campus ecosystem fosters a culture of innovation and collaboration through dedicated AI research and development hubs, including the **Centre for Research and Development in IoT (CREDIT)**, **A.P.C.O.R.E for robotics**, the **Visionary AI Studio (VAS)**, and the **XR Studio**. These centres lead applied research in AI and provide students with opportunities to work on projects with real-world impact.

The university's AI-enhanced teaching methodologies, research excellence, and industry-aligned projects have contributed significantly to producing graduates who are not only academically capable but also industry-ready.

Strategic partnerships with numerous local and international organizations further support this ecosystem. APU's student-led AI Club, recognized as a **Premier Digital Tech Club** by **MDEC**, provides a platform for students to engage in certifications, hackathons, mentorship programmes, and career development events nurturing leadership, creativity, and practical experience in AI.

The university's credentials are also internationally endorsed through its dual-degree partnership with De Montfort University (UK), its QS Five-Star Plus rating, QAA UK accreditation, and its top-tier position in regional rankings such as AppliedHE ASEAN.

Leadership Reflections on a Defining Moment

"We are proud to receive this honour and will continue to lead by example in Malaysia and beyond," remarked Prof Dr Ho Chin Kuan, Vice-Chancellor of APU.

Representing the university on stage to receive the top award**, Professor Dr Ho Chin Kuan, Vice-Chancellor of APU**, remarked: "*This award is a recognition of APU's accomplishments in AI, and also a validation of our commitment to academic excellence, innovation and industry partnership*."

"*At APU, we strive to equip our students not just with technical knowledge, but with the critical thinking and ethical grounding needed to shape the AI-driven future responsibly. We are proud to receive this honour and will continue to lead by example in Malaysia and beyond*," continued Prof Ho.

Recognizing Outstanding Individuals Behind the Success

In addition to the institutional honour, five members of APU's academic team were individually recognized at the national level:

- **Professor Dr Mohammad Falahat**, Director, Strategic Research Institute – National Outstanding Researcher Award
- **Ir Ts Dr Yvette Shaan-Li Susiapan**, Senior Lecturer, School of Engineering – National Outstanding Educator Award (Honourable Mention)
- **Ir Ts Dr Alexander Chee Hon Cheong**, Assistant Professor, School of Engineering – National Outstanding Innovator Award (Honourable Mention)
- **Ir Eur Ing Ts Dr Harvin Kaur Gurchran Singh**, Assistant Professor, School of Engineering – National Outstanding Young Educator Award (Merit Highly Commended)
- **Professor Ts Dr Murali Raman**, Deputy Vice-Chancellor, Academic Development & Strategy – National Excellence in Education and Youth Empowerment Award (Special Recognition)

"Inspiring young minds has always been at the heart of my work," said Prof Ts Dr Murali Raman, Deputy Vice-Chancellor, Academic Development & Strategy, APU.

Professor Dr Mohammad Falahat shared, "*This recognition is a testament to years of perseverance, collaborative research, and a deep commitment to academic inquiry that addresses real-world challenges*."

For **Dr Yvette Shaan-Li Susiapan**, the award was a meaningful milestone: "*Being recognized at a national level is a powerful affirmation that every student we reach, every lesson we deliver, has a lasting impact.*"

Dr Alexander Chee Hon Cheong remarked, "*This award encourages me to keep pushing the boundaries of innovation, and to transform engineering ideas into meaningful outcomes for society*."

Dr Harvin Kaur Gurchran Singh added, "*It is an honour that reflects our shared responsibility to design engaging, future-ready learning environments. This award motivates me to keep empowering students with the skills they need to thrive.*"

Professor Ts Dr Murali Raman reflected on the significance of the award: "*Inspiring young minds has always been at the heart of my work. I am grateful to APU's leadership and my family for encouraging me to make a difference through education and community engagement*."

A Defining Chapter in Private Education

A group photo featuring all category winners at the Private Education Excellence Awards 2025.

Organised by **Koperasi Pendidikan Swasta Malaysia Berhad** in partnership with **Emerald Publishing**, the **EDUCOOP Private Education Excellence Awards** celebrate outstanding contributions from educators and institutions across the private education spectrum from early childhood through to higher education.

Established in 2013, EDUCOOP is dedicated to advancing educational quality, professional development, and national unity through education.

Certificates of recognition were awarded to the winners, underscoring the importance of high-quality private education in shaping Malaysia's future talent pipeline.

Driving the Future of Education, Innovation and Impact

The Private Education Excellence Awards 2025 have once again highlighted the essential role private institutions play in advancing Malaysia's education landscape.

APU's success both at the institutional and individual level reflects a deep-rooted culture of excellence, innovation, and integrity.

As Malaysia continues its journey towards digital transformation, APU stands ready to lead, inspire and nurture the next generation of AI leaders and change-makers at home and on the global stage.

APU's success at the Private Education Excellence Awards 2025 reflects its deep-rooted culture of excellence, innovation, and integrity.

Congratulations!

Your success is an inspiration to all of us at APU

Two APU Researchers Named Among World's Top 2% Scientists in 2025 by Stanford University and Elsevier

Two Asia Pacific University of Technology & Innovation's (APU) School of Engineering (SoE) researchers, **Associate Professor Ir Dr Siva Kumar Sivanesan and Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong**, were named among the **World's Top 2% Scientists 2025** by Stanford University and Elsevier, recognizing their impactful contributions and APU's growing research excellence.

Two distinguished researchers from the Asia Pacific University of Technology & Innovation's (APU) School of Engineering (SoE) have been honored in the prestigious World's Top 2% Scientists 2025 list, compiled annually by Stanford University in collaboration with Elsevier's Scopus Database.

Associate Professor Ir Dr Siva Kumar Sivanesan, Head SoE, and **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong**, Mechanical Engineering Programme Leader have earned this global recognition for their exceptional contributions to their respective fields.

The World's Top 2% Scientists list is widely regarded as a benchmark for identifying the most influential researchers worldwide, spanning a broad spectrum of scientific disciplines.

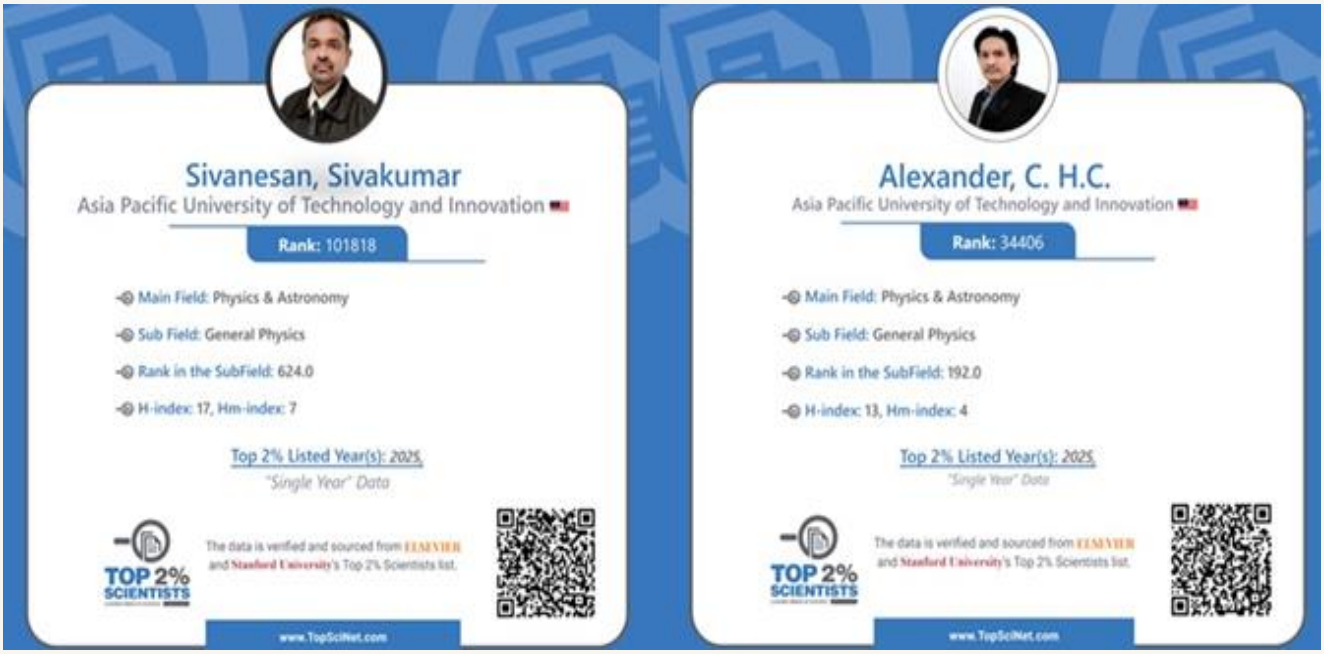
It highlights those whose work has made a substantial impact on advancing knowledge and innovation.

Associate Professor Ir Dr Sivanesan Sivakumar was included to this list for his focused research in general physics, which includes a solid record of scholarly publications and contributions that benefit the scientific community.

His prolonged scholarly endeavor demonstrates a strong desire to further knowledge and guide future scientists.

Meanwhile, **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong** was recognized for his significant contributions to Physics & Astronomy, notably general physics and its multidisciplinary applications.

His scientific career has been defined by ongoing study at the interface of physics, materials engineering, and computational modelling, culminating in contributions that connect theory and practice.



"This remarkable achievement not only shines a spotlight on our talented researchers but also underscores APU's dedication to fostering cutting-edge research with real-world impact," said **Datuk Parmjit Singh**, APU's Chief Executive Officer.

Heartiest congratulations to Associate Professor Ir Dr Siva Kumar and Assistant Professor Ir Ts Dr Alexander Chee for being recognized among the World's Top 2% Scientists.
An exceptional achievement that brings great pride to APU.

Driving Sustainable Energy Through AI: APU's Keynote Presence at ICEMT 2025, Surabaya

Ir. Eur Ing Ts Dr. Harvin Kaur, Program Leader for Petroleum Engineering at the Asia Pacific University of Technology and Innovation (APU), was recently invited as a Keynote Speaker at the **1st International Conference on Energy and Mineral Technology (ICEMT)** held at **PEM Akamigas, Surabaya, East Java, Indonesia.**

With the theme "**Digital Transformation and Artificial Intelligence for Energy Efficiency Enhancement**," the conference brought together a distinguished assembly of global experts, researchers, and industry leaders to explore the intersection of digital innovation, AI, and sustainable energy practices. The event served as a powerful platform to exchange ideas, share research breakthroughs, and align strategies for a low-carbon, technology-driven future.

Dr. Harvin delivered a keynote address titled "**The Future of Petroleum: Digital Transformation and AI for Sustainable Energy Use**," which focused on how digital tools, data-driven systems, and AI applications are revolutionizing petroleum engineering and reshaping the future of global energy systems.

Her talk emphasized the need for academia and industry to collaborate in fostering AI-literate talent and innovation for real-world energy challenges.


PEM AKAMIGAS
ICEMT
THE 1st INTERNATIONAL CONFERENCE ON ENERGY AND MINERAL TECHNOLOGY
Efficiency Enhancement
Dr. Muhd Bin Yahya
Ir. Ir. Fajril Ambia, IPM

In addition to her speaking engagement, Dr. Harvin was given the rare opportunity to visit two notable sites: **Cepu Oil Refinery** and **Teksas Wonocolo**, a living petroleum museum showcasing Indonesia's traditional extraction methods. These visits provided an invaluable glimpse into Indonesia's oil and gas legacy, offering a juxtaposition of heritage and innovation in the energy sector.

Dr. Harvin expressed deep appreciation to **PEM Akamigas** for their warm hospitality and to APU for the support in making this impactful contribution possible.

The experience further cements APU's commitment to being at the forefront of energy innovation and global academic collaboration.

Congratulations to Dr. Harvin on this outstanding achievement and for elevating APU's presence in the global energy and engineering community.

Ir. Ts. Dr. Reena Sri Selvarajan Receives Merit Recognition at ERA Asian Research Excellence Awards 2025

Ir. Ts. Dr. Reena Sri Selvarajan has been awarded **Merit Recognition** at the **ERA Asian Research Excellence Awards 2025** in the category of **Biological Nanotechnology**, acknowledging her sustained contributions to interdisciplinary research in biosensing and graphene-enabled sensing technologies.

Over the past ten years, Dr. Reena has established herself as a researcher specializing in biosensing systems, graphene-based materials, and microfabrication-driven sensor platforms, integrating microelectronics, nanomaterials, and molecular biology to develop advanced sensing solutions for healthcare and environmental applications. Her work emphasizes translational biosensor innovation, bridging laboratory research with real-world deployment potential.

In addition to her research contributions, Dr. Reena has actively mentored student innovation projects, guiding interdisciplinary teams in translating theoretical concepts into validated technology solutions aligned with societal needs. Her efforts continue to strengthen the research ecosystem at the **Asia Pacific University of Technology and Innovation (APU / APIIT).**

Receiving the ERA Asian Research Excellence Merit recognition represents an important milestone in Dr. Reena's research journey and serves as motivation to further expand collaborative, impact-driven work in biological nanotechnology and biosensing technologies. She expressed her gratitude to the Einstein Research Academy for the recognition and congratulated fellow award recipients across the institution.

Our warmest congratulations to Dr. Reena for this remarkable achievement and her continuous efforts in shaping high-impact, translational biosensing research.

APU Engineering Teams Shine at Johor International Innovation Symposium with Silver Wins

Two teams from the **School of Engineering (SoE), Asia Pacific University of Technology & Innovation (APU),** proudly secured **Silver Awards** at the **Johor International Innovation, Invention Competition and Symposium 2025 (JIIICaS 2025).**

This prestigious recognition highlights APU's continued excellence in cultivating engineering talent capable of translating visionary ideas into real-world impact.

Organised by the **Faculty of Computer Science and Mathematics (FSKM), Universiti Teknologi MARA (UiTM)** Johor Branch, Pasir Gudang Campus, JIIICaS 2025 brought together 339 innovators from Brunei, Thailand, Indonesia, and Malaysia.

The event, strategically supported by the Ministry of Economy, Ministry of Science, Technology and Innovation (MOSTI), and Astro, carried the theme "**Bridging Ideas and Reality through Emerging Technologies in Innovation**".

The competition, which ran online from 7 April to 2 September 2025, culminated in a live broadcast of the closing ceremony and winners' announcement from UiTM Johor.

Mentorship and Leadership at the Core

Both award-winning projects were mentored by **Ir Ts Dr Reena Sri Selvarajan,** Senior Lecturer at SoE, APU, with strong support from **Associate Professor Ir Dr Sivakumar Sivanesan**, Head of School.

Their guidance underscores the School's commitment to pairing technical knowledge with industry relevance, equipping students with the expertise, creativity, and confidence to deliver impactful solutions.

The first Silver Award was clinched by a team of Diploma in Mechatronic Engineering students – **Yong Yan Rui, Lee Foo Sam, Ngwe Sandar, and Sarah Wong Pei Li;** with their project "**AI-Guided Wearable for Smart Navigation in the Visually Impaired".**

Their innovation, aptly named **SenseStride**, represents a breakthrough in assistive technology. Unlike traditional tools such as white canes, this next-generation wearable device integrates LiDAR-based obstacle detection, AI-driven environmental analysis, and adaptive haptic feedback. Together, these features deliver intelligent, real-time navigation support, empowering the visually impaired with enhanced independence, safety, and dignity.

While the project is still at Technology Readiness Level (TRL) 1–2, it marks a promising beginning for these young innovators in advancing inclusive technologies.

Offshore Sentinel: Redefining Industrial Safety

The **second Silver Award** went to a cross-level team led by Year 4 student **Kareshmen Maheswaran** (Bachelor of Mechatronic Engineering with Honours), alongside Year 3 student **Dimoharan Pragash** (Bachelor of Computer Engineering with Honours) and Diploma in Mechatronic Engineering students **Chandramohan Akshayan** and **Muhammad Farhan Asykari.**

Their project, "**Offshore Sentinel: AI-Powered Wheeled Drone for Unmanned Cable Surveillance on Offshore Platforms**", directly addresses real-world industrial challenges.

This innovation reimagines offshore inspection practices by offering a robust, AI-powered wheeled drone capable of cable surveillance with precision, adaptability, and efficiency. Having undergone industrial-scale validation, the **Offshore Sentinel reached TRL 6,** positioning it as a game-changing prototype in offshore engineering.

The team's work was further distinguished through publication in the JIIICaS 2025 e-Proceedings, reflecting its academic and industrial value.

Advancing the Global Sustainability Agenda

Both projects align strongly with the United Nations Sustainable Development Goals (SDGs), reinforcing APU's commitment to producing solutions that serve both industry and society.

By pioneering frontier technology, the projects contribute to **SDG 9** (Industry, Innovation, and Infrastructure), **advance SDG 3** (Good Health and Well-Being) through enhanced mobility solutions, and promote **SDG 13 (Climate Action**) by enabling safer, more sustainable offshore practices.

APU's Legacy of Cultivating Engineering Talent

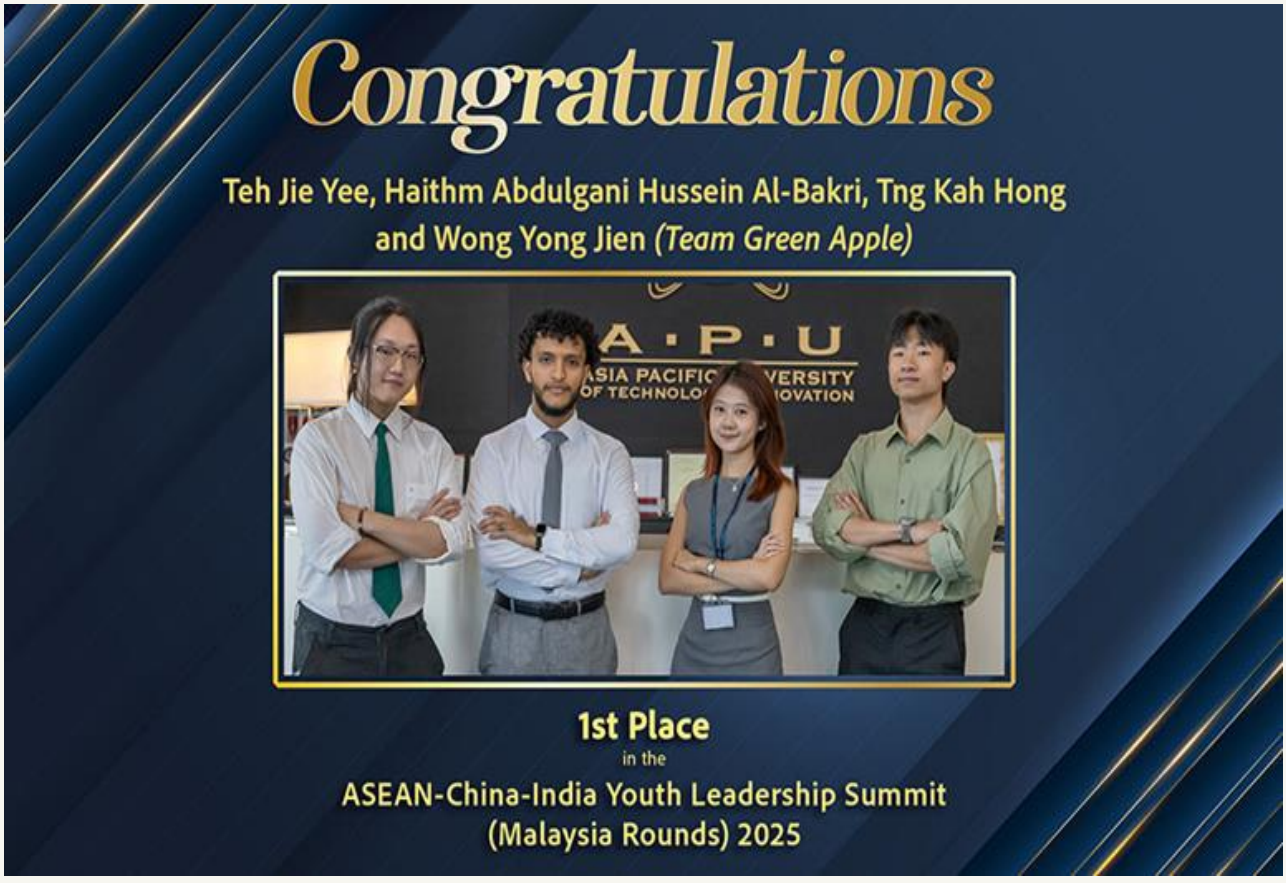
The twin Silver Awards at JIIICaS 2025 reaffirm APU's position as a leading institution in engineering education, where students are nurtured not only in technical expertise but also in critical thinking, creativity, and global outlook.

Through strong mentorship, an emphasis on sustainability, and exposure to international platforms, APU continues to empower its students to transform challenges into opportunities and ideas into innovation.

Reflecting on the achievement, **Associate Professor Ir Dr Sivakumar Sivanesan,** Head of School of Engineering, remarked: "*At APU, our engineering education is complete and wholesome. We cultivate not only technical competence but also innovation, resilience, and ethical values, ensuring our graduates are fully prepared to contribute to society and industry.*"

We proudly congratulate the participating teams for their impressive Silver achievements and for exemplifying APU's spirit of creativity, collaboration, and excellence.

APU Engineering Teams Shine at Johor International Innovation Symposium with Silver Wins



The **Asia Pacific University of Technology & Innovation (APU) Green Apple** team secured **first place** in **the Malaysian round of the ASEAN-China-India Youth Leadership Summit 2025** with their innovative food waste solution, FoodUp; a low-cost system using black soldier fly larvae to reduce waste and emissions while generating income which, despite being their first competition, earned them the honour of representing Malaysia at the Grand Finals in Singapore this October.

The team from the Asia Pacific Centre of Robotics Engineering (APCoRE), made up of students from **Petroleum Engineering, Mechatronic Engineering, and Electrical and Electronic Engineering — Teh Jie Yee, Haithm Abdulgani Hussein Al-Bakri, Tng Kah Hong, and Wong Yong Jien;** was mentored by **Ts Suresh Gobee**, Head of APCoRE.

Competing under the name **Green Apple**, they faced strong competition from around 150 participants across 38 teams in the Malaysian round.

Their victory means they will proudly represent Malaysia at the Grand Finals in Singapore this October, where 120 young leaders from 12 countries will converge.

For the Malaysian round, the team presented a clever, low-cost waste management solution that utilizes black soldier fly larvae (BSFL) to tackle urban food waste.

This approach not only reduces landfill waste but also curbs greenhouse gas emissions, while creating a sustainable income stream.

Teh Jie Yee reflected on their debut in the competition, explaining that the team's strength lay in blending innovation with practical application.

"*FoodUp stood out because it offers a real, scalable, and cost-effective way to upcycle 100% of food waste using BSFL and anaerobic digestion. We demonstrated its technical feasibility and supported it with a detailed financial plan that surpassed existing solutions,*" he said confidently.

Drawing on hands-on project experience, Green Apple convinced the judges that FoodUp was not just theory, but it was ready for real-world impact.

"It took countless hours of brainstorming, refining, and constructive debate, but that process sharpened our ideas and turned our teamwork into our greatest asset," **Jie Yee** shared.

The competition also taught them to approach problems from fresh angles. By applying critical and design thinking, the team uncovered hidden challenges in current food waste systems, gaps often overlooked by existing solutions and users alike.

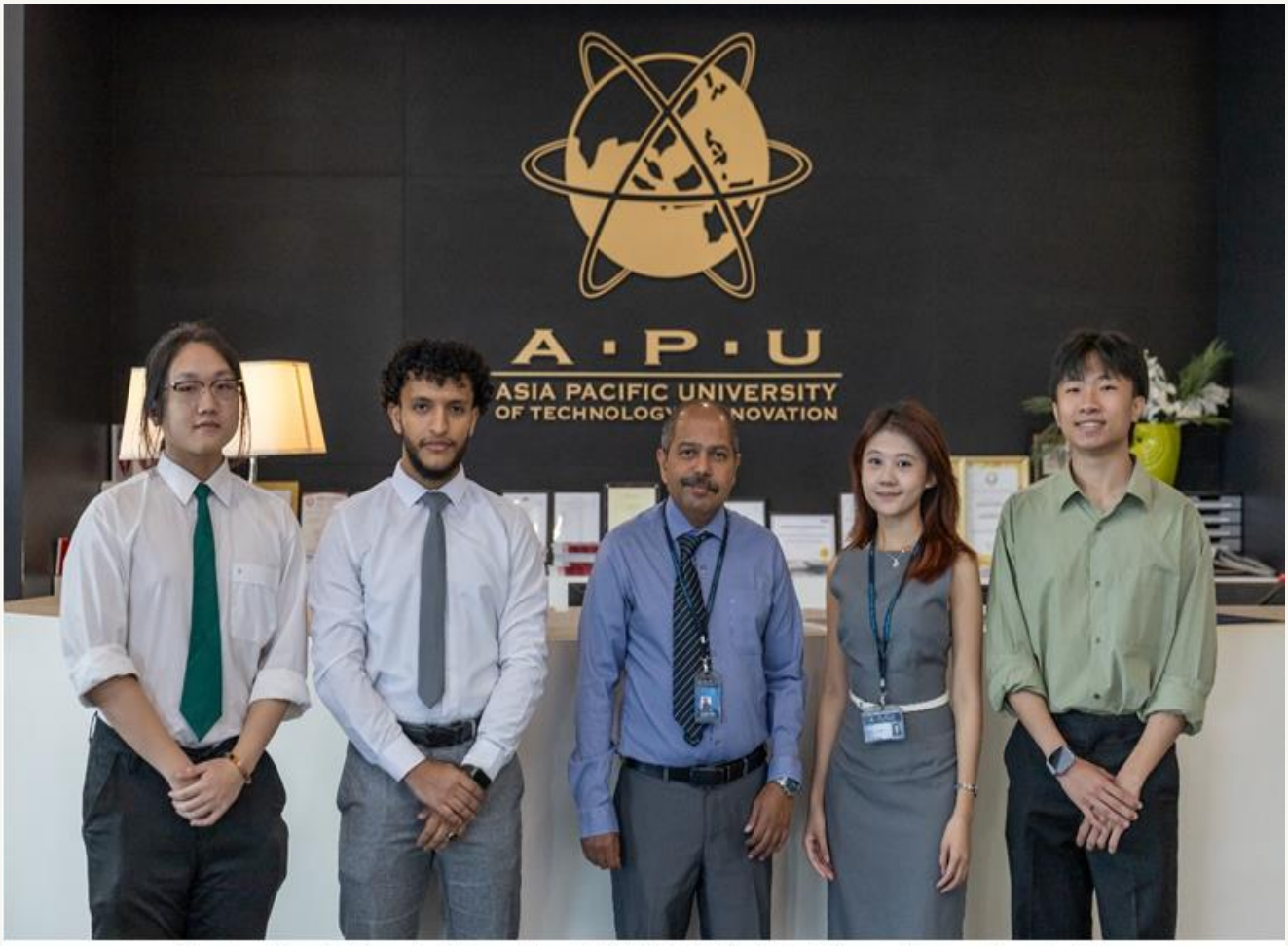
"Those gaps became opportunities for FoodUp to shine. For us, true innovation does not just solve the obvious problems. It addresses what is been neglected. This journey taught us to think deeply, creatively, and empathetically; skills that extend far beyond engineering," **Jie Yee** explained.

The road was not without its hurdles. The team faced moments of frustration as new challenges arose just when they thought they had found the perfect solution.

"But those setbacks pushed us to go further, test harder, and refine smarter. Seeing our hard work come to life and ultimately being crowned Malaysia's champion, made every struggle worthwhile."

"This competition was a pivotal moment for us. It gave us the space to enhance our problem-solving, design thinking, teamwork, and resilience. More importantly, it reminded us that engineering is not just about numbers, but it is about creating impactful solutions for the world," added **Jie Yee.**

Looking ahead, the Green Apple team is eager to continue their journey, taking part in more competitions to hone their skills and expand their learning.



Mentored by Ts Suresh Gobee, Head of APCoRE (middle), Green Apple shines bright.

Well done, Team Green Apple!

Your innovation, dedication, and teamwork have truly made APU proud.

APU Engineering Teams Shine at Johor International Innovation Symposium with Silver Wins

Representing the Asia Pacific University of Technology & Innovation (APU), **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong** shared Malaysia's and APU's progress in digital and blended learning at the **Regional Consultative Meeting on Blended Learning in TVET**, held in **Chennai, India.**

The Asia Pacific University of Technology & Innovation (APU), proudly represented **Malaysia** at the **Regional Consultative Meeting** on **Developing a Blended Learning Model** for Polytechnic and ITI Institutions in Commonwealth Asia Countries in the TVET Sector, held in Chennai, India.

The event was jointly organised by the **Commonwealth Educational Media Centre for Asia (CEMCA)** and the **National Institute of Technical Teachers Training and Research (NITTTR), Chennai.**

The three-day regional meeting brought together policymakers, institutional leaders, and experts from Bangladesh, Brunei Darussalam, Malaysia, Maldives, Pakistan, Singapore, Sri Lanka, and India.

Together, they co-developed a Regional Collaborative Framework for Blended Learning in TVET, focusing on integrating policy, pedagogy, technology, and inclusion across Commonwealth Asia.

Representing both APU and Malaysia, **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong**, Mechanical Engineering Programme Leader, took part in the **National Landscapes technical session** alongside representatives from the Ministry of Higher Education (MoHE), Universiti Malaysia Pahang Al-Sultan Abdullah, and Universiti Tun Hussein Onn Malaysia.

Dr Alexander's presentation highlighted Malaysia's progressive adoption of blended and digital learning within the TVET sector, with a particular focus on APU's forward-thinking model that blends industry-driven pedagogy, micro-credential pathways, and digital learning ecosystems aligned with Industry 4.0 competencies.

The meeting featured keynote addresses, regional case studies, and collaborative workshops exploring frameworks for institutional readiness, curriculum innovation, technology integration, and faculty development.

Participants also took part in a national action-planning session, and an exposure visit to the **National Instructional Media Institute (NIMI)**, where they observed advanced instructional media production for blended TVET delivery.

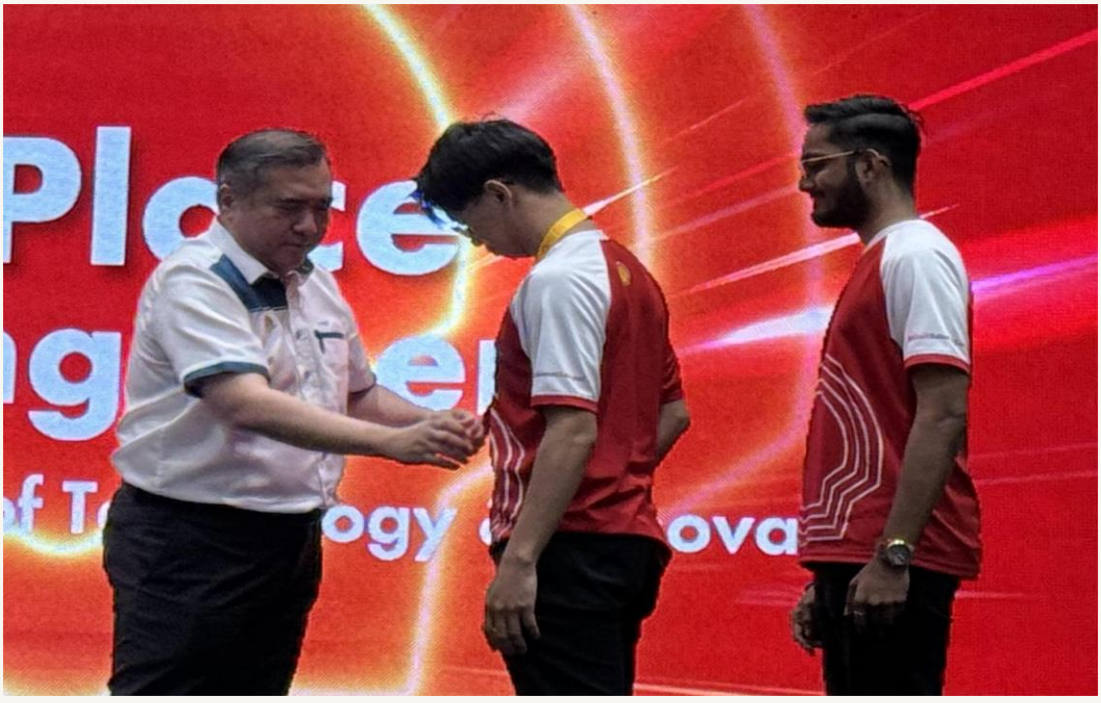
APU's active participation underscored Malaysia's ongoing commitment to advancing flexible, inclusive, and technology-enabled education ecosystems.

As a Premier Digital Tech Institution, APU continues to champion international collaborations with organizations such as **COL-CEMCA**, driving innovation in TVET transformation, open learning, and digital pedagogy across the Commonwealth.

APU extends heartfelt congratulations to Dr Alexander Chee for elevating Malaysia's and APU's presence in shaping the future of blended learning across the Commonwealth.

APU Team Achieves Top 5 in Shell Selamat Sampai Varsity Challenge 2025

Asia Pacific University of Technology & Innovation (APU) Mechatronic and Electrical & Electronic Engineering students — **Lai Keng You, Pua Jun Yu, Kannan Uthaya Kumar, and Rohit Thomas** — won **fifth place and a RM1,000 cash prize** at **the Shell Malaysia** competition with **MOTOSAFE**, an intelligent motorcycle hazard detection system aimed at reducing road accidents



Asia Pacific University of Technology & Innovation (APU) proudly announces its achievement as one of the **Top 5 finalists** in the **Shell Malaysia #ShellSelamatSampai Varsity Challenge 2025**, a national-level innovation competition focused on road safety and youth-driven solutions.

This year's challenge saw participation from 26 public and private universities across Malaysia, making APU's placement among the top five a remarkable accomplishment.

The competition spanned 10 weeks, during which student teams developed innovative solutions to address pressing road safety issues in Malaysia.

The APU team's project, **MOTOSAFE**, by Mechatronic Engineering and Electrical and Electronic Engineering students **Lai Keng You, Pua Jun Yu, Kannan Uthaya Kumar, and Rohit Thomas**, is an intelligent motorcycle hazard detection and collision avoidance system developed to address the alarming rate of motorcycle-related accidents in Malaysia, which account for over 60% of road fatalities.

This impactful project was guided by a dedicated mentor comprising of Head School of Engineering (SoE), **Associate Professor Ir Dr Siva Kumar** Sivanesan and his team **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong, Ir Ts Dr Denesh Sooriamoorthy, and Ir Ts Dr Yvette Shaan-Li Susiapan.**

Over a span of 10 weeks, the team engineered a solution that integrates AI-powered pothole detection, blind spot monitoring, haptic feedback alerts, and helmet-integrated safety features such as HUD alerts and LED visibility.

"*MOTOSAFE aims to enhance rider awareness and response time, contributing to safer roads nationwide*," said Keng You, representing his team.

"*This was our first time joining the competition, and we are happy to have secured fifth place and received a RM1,000 cash prize from Shell Malaysia*.

"**More importantly, our innovation was recognized for its potential to save lives and contribute to safer roads nationwide."**

He added that the competition gave them valuable practical experience that complemented their studies.

"*For example, it allowed us to apply engineering design and problem-solving skills in a real-world project.*

"It also met our expectations by allowing us to test our technical knowledge beyond the classroom."

A big congratulations to our talented students and mentors for this national-level success. Your innovation continues to elevate APU's engineering excellence.

APU Researchers and Students Shine at ERA Asian Research Excellence Awards 2025

Two distinguished faculty members and two student research teams from the **Asia Pacific University of Technology & Innovation (APU)** were recognized for their outstanding achievements at the **Einstein Research Academy (ERA) Asian Research Excellence Awards 2025** ceremony, held on 10 October 2025. The event celebrated research excellence across Asia, highlighting projects that advance the **United Nations Sustainable Development Goals (UNSDGs).**

Professor Dr Mohammad Falahat, Director of the Strategic Research Institute (SRI) at APU, was honored in the **Sustainable and Innovation in Business and Management** category. His award underscores APU's strength in developing forward-thinking and sustainable business solutions that address contemporary challenges faced by global industries.

Meanwhile, **Assistant Professor Ir EUR ING Ts Dr Lau Chee Yong**, from APU's School of Engineering (SoE), received recognition in the **Engineering Innovation** category. His accolade reflects the university's continued excellence in technological research, focusing on innovative engineering solutions that enhance efficiency, sustainability, and real-world application.

The award ceremony was held at **INTI International University**, where **Professor Dr Wong Ling Shing**, Pro Vice-Chancellor of Research and Innovation at INTI, presented the awards as the ERA Asian Chairman.

The **ERA Asian Research Excellence Awards**, organised by the Einstein Research Academy, an international research institution based in Puducherry, India, recognize outstanding contributions from researchers across Asia. The awards highlight achievements in science, technology, innovation, and education, rewarding efforts that advance the **UNSDGs** through creative and impactful research.

Adding to the university's accolades, APU's student teams also triumphed at the **ERA Inter-Varsity Innovation Competition 2025**, which gathered participants from top institutions across the region. The competition assessed projects based on originality, technical merit, feasibility, and potential real-world impact.

A team consisting of **Lek Yong Bin, Loh Ying Chong, Wong Che Kai, and Kalyana Samadhi**, representing APU's engineering disciplines, won the **Gold Award** for their project titled "**Smart Microgrid Ecosystem".**

Their work showcased innovative approaches to sustainable energy management, addressing key challenges in power distribution and renewable energy integration. The project's focus on developing resilient and efficient microgrids reflects a growing need for sustainable energy systems, particularly within developing economies in the Asia-Pacific region.

A Silver Award was also presented to another APU team led by **Associate Professor Ir Dr Siva Kumar Sivanesan,** Head of the School of Engineering, and **Ir Ts Dr Denesh Sooriamoorthy**, alongside students **Muthmainna Nasywa Ashary, Chai Jien Joe, and Chung Zi Da**. Their project, "**Development of a Wearable AI-Driven System for Cardiovascular Risk Detection**", demonstrates the university's commitment to applying artificial intelligence in healthcare. This wearable system enables early detection of cardiovascular risks, potentially transforming preventive healthcare and saving lives through timely intervention.

As Malaysia continues to establish itself as a regional hub for innovation and technology, APU's success at the ERA Asian Research Excellence Awards underscores the nation's growing strength in research and development. The university remains committed to nurturing an ecosystem where innovation thrives; empowering faculty and students to push boundaries, explore new frontiers, and contribute meaningfully to global technological progress.

Congratulations to our outstanding researchers and student teams for their remarkable success at the ERA Asian Research Excellence Awards 2025. Your achievements continue to elevate APU's research excellence regionally and globally.

APU Academics Advance Malaysia's Semiconductor Frontier through Elite Training in China

Two faculty members from the School of Engineering (SoE) at the Asia Pacific University of Technology & Innovation (APU) have been selected among only ten academicians nationwide to participate in an intensive semiconductor training programme in China. This milestone underscores APU's pivotal role in advancing Malaysia's semiconductor education and nurturing future-ready engineers for a rapidly evolving industry.

Senior Lecturer **Ir Ts Dr Reena Sri Selvarajan** and **Assistant Professor Ir EUR ING Ts Dr Lau Chee Yong** were chosen by the **Malaysia Digital Economy Corporation (MDEC)** and the **Advanced Semiconductor Academy of Malaysia (ASEM)** to attend the prestigious week-long programme in mid-October 2025, titled **"Advanced Testing and Packaging in IC Design".**

Their work showcased innovative approaches to sustainable energy management, addressing key challenges in power distribution and renewable energy integration. The project's focus on developing resilient and efficient microgrids reflects a growing need for sustainable energy systems, particularly within developing economies in the Asia-Pacific region.

The programme took place at the **School of Microelectronics, Southern University of Science and Technology (SUSTech)** in **Shenzhen**, widely known as **China's Silicon Valley**. It formed part of the **National Semiconductor Strategy (NSS 2025)** Malaysia's strategic initiative aimed at building a robust and future-ready semiconductor ecosystem.

This landmark initiative focuses on empowering educators with the latest technical knowledge, tools, and practical insights essential to propel Malaysia's semiconductor ambitions forward. The training served as a bridge connecting theoretical expertise with industrial practices, reinforcing Malaysia's vision of becoming a key contributor in the global semiconductor supply chain.

Throughout the intensive week, both APU academics gained an in-depth understanding of microelectronics and semiconductor technologies, guided by an exceptional faculty of experts. Renowned **Professors Prof Ye Huaiyu and Prof Guo Yuejin** delivered lectures on critical subjects, including Introduction to **IC Testing, Advanced Packaging, Flip Chip Technology, and Advanced Reliability Testing & Failure Analysis**.

The programme was designed to ensure a balanced learning experience combining rigorous theoretical sessions with immersive hands-on training. Laboratory visits and demonstrations were held **at CECC Lab, SZU Lab, and SZIIT Lab,** all equipped with state-of-the-art semiconductor fabrication and testing facilities.

These practical components allowed participants to experience semiconductor manufacturing processes and testing methodologies firsthand, translating academic knowledge into tangible skills.

In addition to classroom and laboratory sessions, participants engaged directly with industry leaders through visits and discussions with **WinTech Nano-Technology Services Pte Ltd** and **Shenzhen Mifei Technology Co., Ltd.** These interactions provided an invaluable glimpse into current industry practices, technological challenges, and emerging market demands shaping the global semiconductor sector.

A key highlight was a collaborative discussion session led by the **ASEM Team Leader**, which focused on aligning academic curricula with industry needs and fostering cross-institutional collaboration. This dialogue emphasized the urgency of creating industry-relevant programmes that respond dynamically to Malaysia's semiconductor development priorities.

The successful completion of this advanced training by **Dr Lau** and **Dr Reena** symbolizes APU's steadfast commitment to staying at the forefront of semiconductor education. The insights, knowledge, and technical competencies gained from this exposure will be channelled directly into APU's curriculum, enhancing students' learning experiences and employability in the high-value semiconductor sector.

Both academicians expressed deep gratitude for the opportunity to learn within Shenzhen's innovation ecosystem, an environment that blends research, manufacturing, and entrepreneurship into a powerful technology hub. They believe the exposure will enable APU to better equip students with the skills and adaptability needed to thrive in this fast-growing field.

As Malaysia continues to advance its position in the global semiconductor supply chain, APU remains steadfast in supporting the nation's strategic goals through knowledge transfer and innovation-driven education.

The participation of its academics in this global learning initiative reaffirms APU's integral role in strengthening Malaysia's semiconductor talent pipeline and research ecosystem.
Reflecting on this achievement, **Associate Professor Ir Dr Siva Kumar Sivanesan,** Head of the School of Engineering, said:

"This milestone is a testament to APU's dedication to nation-building through education and innovation. By empowering our academics with in-time industrial exposure and cutting-edge expertise, we ensure that knowledge flows seamlessly from the classroom to the country's economic fabric."

At APU, we are not only shaping engineers; rather, we are shaping the future of Malaysia's high-tech industries through continuous learning, collaboration, and the relentless pursuit of excellence," he continued.

Through initiatives such as this, APU continues to reinforce its position as a key contributor to Malaysia's technological progress, as a university that educates, innovates, and inspires the next generation of semiconductor leaders.

Congratulations to Dr Reena and Dr Lau for being selected among Malaysia's top academicians. Your achievement marks another proud milestone for APU in advancing semiconductor excellence.

APU Secures USD 150,000 Seed Grant to Lead Global Innovation in Digital Geoscience Education

The Asia Pacific University of Technology & Innovation (APU) has once again demonstrated its global leadership in digital education and interdisciplinary STEM innovation by securing a **USD 150,000 Seed Grant** under the prestigious **Deep-Time Digital Earth (DDE) Big Science** Programme.

This major funding positions APU at the forefront of research in digital geoscience education, setting new benchmarks for the use of immersive technologies in teaching and learning.

The grant supports APU's newly formalized international partnership with three globally renowned institutions; the **Suzhou Deep-Time Digital Earth Research Centre (Suzhou Centre), the Secretariat of Deep-Time Digital Earth Big Science Program (DDE) and the American Geosciences Institute (AGI),** in a joint effort to redefine how young learners understand and explore the Earth's deep-time systems through cutting-edge digital technologies.

Suzhou Centre (administrative arm) and DDE, endorsed by **UNESCO**, stand among the world's most ambitious scientific collaborations, integrating massive deep-time geoscience datasets to promote sustainable research and innovation. Meanwhile, AGI, based in the United States, is a globally respected institute dedicated to advancing the geosciences through research, education, and public engagement.

The partnership agreement was formally signed on 1 September 2025 by **APU Vice Chancellor Professor Dr Ho Chin Kuan**, Suzhou Centre Director Professor Jianbo Sun, and DDE Secretary General **Dr Ishwaran Natarajan**. This milestone marked APU's inclusion in a network of elite global institutions striving to advance data-driven Earth systems education and research.

At the heart of this collaboration lies an innovative three-year research project titled "**Innovative Uses of Digital Outcrop Models (DOMs) in Pre-College Education**", funded by the grant. The project will explore the transformative educational potential of 3D Digital Outcrop Models high-resolution virtual representations of geological formations as tools for immersive, experiential learning.

By integrating DOMs into general science and interdisciplinary classrooms, the project aims to enhance spatial reasoning, data interpretation, and scientific inquiry skills among upper-secondary and pre-university students in both Malaysia and the United States. These capabilities are increasingly vital in nurturing a future-ready workforce equipped for the challenges of the 21st century.

The project is co-led **by Professor Dr Abtar Darshan Singh**, Director of APU's Digital Learning Hub and UNESCO Chair on Harnessing Innovations in Technology to Support Teachers and Quality Learning, alongside Professor Edward Robeck from the American Geosciences Institute.

Supporting the initiative from **APU are Ir EUR ING Ts Dr Harvin Kaur Gurchran Singh,** Assistant Professor at the School of Engineering (SoE), and **Ts Jonathan JS Kovilpillai**, Programme Manager of the Digital Learning Hub.

Together, the team will co-develop lesson plans, assessment tools, and instructional content that integrate scientific, cultural, and environmental perspectives embodying UNESCO's call for transdisciplinary and inclusive education.

This groundbreaking collaboration brings tangible, long-term benefits to APU:

- Research Leadership: Reinforces APU's status as a regional leader in technology-enabled geoscience education, paving the way for joint publications, exchanges, and future global grants.

- Reputation and Recognition: Enhances APU's global visibility as a multidisciplinary university committed to sustainability, innovation, and educational excellence.

- Talent Pipeline: Attracts students and scholars passionate about STEM, digital education, and cross-border research.

- National Contribution: Aligns with Malaysia's national priorities in STEM, digital transformation, and future workforce readiness, supporting the nation's MyDIGITAL agenda and the Ministry of Higher Education's strategic goals.

Between 2025 and 2028, the project will roll out in phases including pilot implementations in schools, teacher training, and iterative research leading to the publication of empirically validated teaching frameworks that can be adapted globally.

Reflecting on this milestone, Prof Dr Abtar Darshan Singh stated, "This Seed Grant is a catalyst for innovation. Through this collaboration, we will push the boundaries of how digital technologies can enrich learning in geoscience and beyond. It strengthens APU's Digital Learning Hub as a centre of excellence for technology-driven education, where research, creativity, and inclusivity converge to empower the next generation of learners and educators."

With this bold step, APU reaffirms its unwavering commitment to bridging technology and humanity through education, driving meaningful global impact from Malaysia to the world.

Congratulations to Dr Harvin for being part of this prestigious global research collaboration

APU Strengthens National Research Leadership with Prestigious Grants from MOHE, MCMC and Global Industry Partners

The Asia Pacific University of Technology & Innovation (APU) continues to solidify its position as one of Malaysia's most dynamic research-driven private universities, as seven of its distinguished academics secured highly competitive national and international research grants.

This achievement reflects not only the calibre of APU's academic talent but also the trust placed in the institution by the **Ministry of Higher Education (MOHE), the Malaysian Communications and Multimedia Commission (MCMC)**, and prominent global industry players.

Backed by robust support from APU's Research Management Centre (RMC), the university continues to advance research excellence by promoting interdisciplinary collaboration, fostering an innovation-driven culture, and securing impactful funding opportunities.

The latest achievements underline APU's rising influence in areas of national importance such as digital inclusion, community empowerment, sustainability, advanced engineering, tourism innovation, and global STEM development.

APU's commitment to shaping a responsible and inclusive digital society is reinforced through **Assistant Professor Ir EUR ING Ts Dr Lau Chee Yong'**s success in securing the **Digital Society Research Grant (DSRG)** from MCMC.

His project investigates **Digital Citizenship, Cyberwellness, and Digital Inclusion;** three areas critical to Malaysia's transition into a progressive digital-first nation. The research outcomes are expected to inform national digital policies, guide online safety frameworks, and empower Malaysians with the skills and knowledge needed for equitable participation in the digital economy.

In partnership with **Infinecs Systems Sdn Bhd**, School of Engineering (SoE) **leaders Professor Ir Dr Lai Nai Shyan** and **Ir Dr Lian Wen Xun** secured a significant research grant to support real-world engineering projects for final-year students. This collaboration nurtures industry-ready graduates with strong competencies in electronics design, IoT applications, and semiconductor technologies fields vital to Malaysia's position in the regional technology value chain.

This momentum continues at the School of Technology, where **Western Digital Tech and Regional Center (M) Sdn Bhd** awarded a project grant led by Ts Umapathy Eaganathan. The initiative bridges academic learning with hands-on industrial practice, empowering students to develop practical solutions to genuine organizational challenges and elevating their readiness for careers in advanced digital and engineering sectors.

APU's expanding portfolio of grants ranging from fundamental academic enquiries to international industry partnerships demonstrates its strategic vision of aligning research with global challenges and national development priorities. Each achievement reflects the dedication of its academics and the university's unwavering commitment to producing impactful knowledge that advances society, empowers communities, and drives innovation.

In congratulating APU's academic community, Vice Chancellor Professor **Dr Ho Chin Kuan** remarked, *"These achievements reflect the intellectual strength and collaborative spirit that define APU. Our academics continue to push the boundaries of knowledge, translating ideas into real-world impact. We are proud of their contributions, and we remain committed to nurturing a research ecosystem that inspires innovation, shapes industries, and uplifts society."*

A big congratulations to Dr Lau and Dr Lai! Your contributions to cutting-edge research and industry collaboration are shaping future-ready engineers and elevating APU's national standing.

APU Academic Honoured with Regional Recognition for Advancing Petroleum Engineering Education

Ir EUR ING Ts Dr Harvin Kaur receives prestigious honour for her outstanding service and impact across the North Asia Pacific region.

Asia Pacific University of Technology & Innovation (APU) celebrates a remarkable milestone as **Ir EUR ING Ts Dr Harvin Kaur**, Programme Leader for Petroleum Engineering at the School of Engineering (SoE), was conferred the **Society of Petroleum Engineers (SPE) Regional Service Award for the North Asia Pacific Region**.

The award was presented during the Dinner Night on the opening day of the **SPE Asia Pacific Oil & Gas Conference and Exhibition (APOGCE 2025),** held over three days in Jakarta, Indonesia.

Recognised by SPE International, this notable accolade honours Dr Harvin's sustained contribution to the advancement of energy education, STEM outreach, and petroleum engineering knowledge dissemination. Her leadership has strengthened vital links between academia and industry, inspiring and empowering young engineers and students across Malaysia and the wider region to pursue impactful careers in the energy sector.

Dr Harvin has played a key role in driving community-based STEM programmes under **SPE Kuala Lumpur Section's Energy4me** initiative and mentoring numerous student chapters nationwide.

She has also championed APU's outreach efforts through her award-winning STEM Power-Up initiative, a programme focused on innovative teaching approaches and technology integration in engineering education.

In addition to receiving this honour, **Dr Harvin** was appointed **Session Chair** for the **Postgraduate Technical Presentation** segment at APOGCE 2025, demonstrating her continued excellence within the petroleum engineering community.

She also represented APU at the **SPE North Asia Pacific Regional Meeting,** contributing her perspective to discussions shaping education, sustainability, and inclusivity within the evolving global energy ecosystem.

Reflecting on her achievement, Dr Harvin remarked, *"It's truly meaningful to represent APU and Malaysia at a regional platform that celebrates innovation, knowledge sharing, and service. This recognition reinforces the collective commitment of our APU community to inspire and nurture the next generation of engineers and energy professionals."*

Dr Harvin's success exemplifies the nurturing environment APU provides to its academics, enabling them to thrive professionally and contribute regionally and internationally. Through strong industry engagement, interdisciplinary collaboration, and a culture that encourages innovation, APU continues to serve as a leading platform for academic excellence, driving positive impact across sectors and preparing future-ready professionals for the global energy landscape.

Congratulations, Dr Harvin, on this outstanding regional recognition!

APU's Centre for Research and Development of IoT (CREDIT) Achieves 34 Awards in a Groundbreaking Year of Innovation in AI, Robotics and IoT

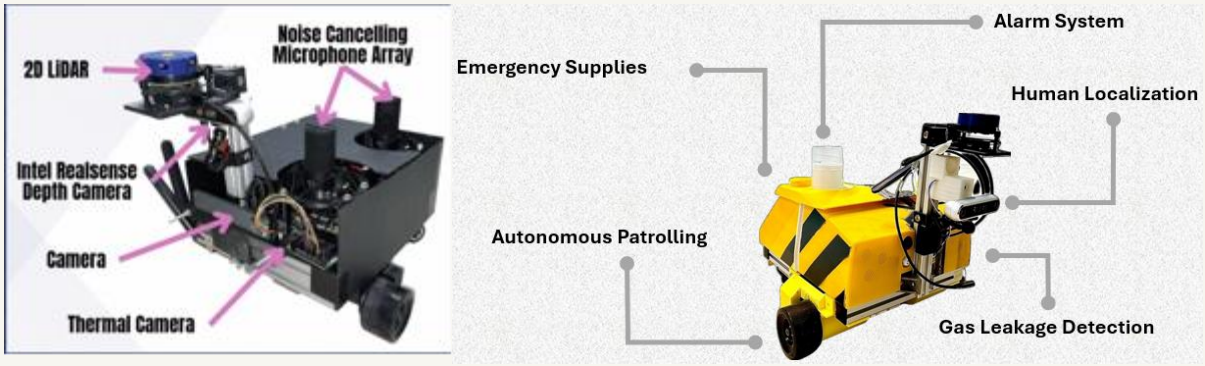
Throughout 2025, students from the **Centre for Research and Development of IoT (CREDIT)** at the Asia Pacific University of Technology & Innovation (APU) have secured an extraordinary 34 awards across four major national and international competitions, marking one of the institution's most outstanding years in innovation excellence.

Leading the centre's achievements are **Assistant Professor Dipl-Ing Inv Ir Narendran Ramasenderan**, Head of CREDIT, and research mentor Mr Krishna Ravinchandra, who's hands-on, industry-driven guidance has transformed student creativity into globally recognized breakthroughs.

This sweeping success spans diverse fields powered by IoT, robotics, automation and applied AI from autonomous healthcare systems to sustainable waste management, industrial automation to precision agriculture, and underwater exploration to disaster response demonstrating APU's position as one of Malaysia's most dynamic innovation ecosystems.

The year's achievements began with a strong showing at **IBIEC 2025 in Sarawak,** where APU teams secured seven awards across seven innovations. Projects ranged from next-generation athlete performance analytics to AI-powered waste management systems and industrial inspection rovers. Student teams impressed judges with solutions that reflected real-world applicability, user- centered design, and strong technical implementation.

Their momentum carried into the **Malaysia Startup Challenge 2025**, where APU swept 16 awards, including **seven Golds, six Silvers and three Bronzes.** CREDIT's emphasis on market readiness was evident, with many submissions demonstrating not only technical sophistication but also viable pathways toward commercialisation. Innovations included autonomous farm-management systems, UV-C hospital disinfection robots, flood-response AGVs, underwater drones for marine conservation, and cutting-edge reinforcement learning platforms.



The innovation streak continued internationally at iCAN Toronto 2025, where CREDIT teams collected seven awards across two flagship projects. **Rumi Iqbal Sufi's MediGuard AI Rover** (a mobile healthcare security system capable of autonomous patrols, emergency intervention and LLM-assisted medical support) was named among the competition's Top 10 Best Inventions. Meanwhile, **Andrew Ng Chee Wei** and his team impressed with the InteliSwarm Sentinel (a multi-unit swarm robotics inspection ecosystem that significantly reduces facility maintenance time through coordinated robotic intelligence).

Malaysia's innovation pride reached its peak on 16 September 2025, when APU students brought home four prestigious awards at **Salt Lake City's DAVINCI** Expo a symbolic victory achieved on Malaysia Day. The MediGuard AI Rover earned Gold as well as Special Awards from organisations in North America and Asia, underscoring its global relevance and strong potential for real-world deployment in healthcare environments.

According to CREDIT's founder and APU's Chief Innovation & Enterprise Officer, **Professor Ir EUR ING Dr Vinesh Thiruchelvam**, the 2025 achievements reflect the maturation of a long-term strategy that was to put AI at the frontier of human-centric design development. "*These 34 awards across four major competitions aren't just victories, but they're a validation of a systematic approach to innovation. We focus on solving real complex problems, enforcing rigorous standards and compliance, and developing talents who can think critically and execute effectively.*"

This framework has enabled CREDIT to produce solutions tailored to sectors critical to Malaysia's development, from agriculture and healthcare to environmental sustainability and advanced manufacturing. It has also resulted in an innovation culture where students learn to build not just prototypes, but viable, scalable technologies with measurable impact.

CREDIT's work is built on a deliberate pedagogy anchored on six core working principles:

1. Starting with real stakeholder problems,
2. Driving interdisciplinary collaboration,
3. Using industry-level tools,
4. Enforcing iterative development,
5. Embedding sustainability considerations, and
6. Cultivating a global mindset while maintaining strong local relevance.

The centre's emphasis on real-world deployment is already showing results. Several of 2025's award-winning innovations, particularly **MediGuard, Palm Vision, SecurePath** and various industrial **AGV systems,** are undergoing discussions with local industry partners for pilot testing and technology transfer.

"Competitions open doors, but commercialisation is the real destination," notes Prof Vinesh. "*We're now working with NextGen Technologies, APU's innovation commercialisation arm, to bring these technologies into real environments."*

For students, the experience is nothing short of transformational. Many credit the CREDIT environment for instilling not only technical mastery, but also the confidence needed to articulate ideas, defend their work and collaborate with multidisciplinary teams.

Students such as **Rumi Iqbal Sufi, Andrew Ng, Darrick Aaron Untarman, and Samantha Koay** have each emerged as ambassadors of innovation, demonstrating that undergraduates when supported by the right ecosystem can produce solutions of global significance.

Asst Prof Ir Narendran emphasizes that CREDIT's role extends far beyond winning competitions. *"Our goal is to prepare students for future industries that will rely on autonomous systems, AI-driven decision-making, sustainable technologies and robotics. What we are building is not just prototypes, but problem solvers."*

With 2025 marking a watershed year, CREDIT is already gearing up for 2026, with plans for expanded research in swarm robotics, healthcare automation, AI-enhanced agriculture, and sustainability-driven IoT systems. Partnerships with ASEAN universities, IP protection initiatives, and industry collaborations are also being strengthened as part of CREDIT's next phase of expansion.

APU's CREDIT Centre has not only demonstrated Malaysia's capacity to innovate at a global level but has also laid the groundwork for nurturing the next generation of homegrown inventors, technologists and entrepreneurs. As the centre continues to scale its impact, the 34 awards earned in 2025 serve as a launchpad for even greater breakthroughs ahead.

Bravo to CREDIT's innovators and mentors! Your impressive accomplishments reflect APU's strong culture of research, creativity, and real-world impact.

APU's "Hello World!" Makes History as the Only Team to Qualify for Both Tracks at UMPSA x HUAWEI AppGallery Competition

A team of three exceptional students from the Asia Pacific University of Technology & Innovation (APU) has achieved an unprecedented milestone at the **UMPSA x HUAWEI AppGallery Mobile App Competition 2025**. Competing against more than 400 participants nationwide, Team "Hello World!" emerged as the only team to secure Top-10 finalist positions in both Track A and Track B, a historic first for the competition.

Mentored by **Ir Ts Dr Denesh Sooriamoorthy**, Assistant Professor at APU's School of Engineering (SoE), the trio; **Shawn Lee Yen Zheng** (Bachelor of Computer Engineering with Honours), **Chan Hao Wen** (Diploma in Information & Communication Technology with a specialism in Software Engineering), and **Chiu Jing Xian** (Bachelor of Science (Hons) in Software Engineering) demonstrated outstanding innovation, technical capability, and cross-disciplinary problem-solving throughout the challenge held on 19 November 2025.

Track A required students to conceptualize a mobile app addressing real-world societal issues. Standing out among over 297 contestants and more than 100 teams, the APU trio proposed NutriPal; a thoughtful, AI-powered application designed to support low-income families in planning nutritious yet affordable meals.

NutriPal offers a suite of tools that combine data, affordability, and community support, including:

- AI-driven meal planning based on real-time local food prices
- Barcode scanning for instant nutritional insights
- Partnerships with grocery stores to offer discounts and surplus produce
- Health tracking tools, including BMI and nutrient balance
- A recipe-sharing community for practical, budget-friendly cooking

Track B took the competition a step further by challenging students to develop, publish, and pitch a fully functional application on Huawei AppGallery. Against over 119 participants across more than 40 teams, APU's entry showcased the team's technical maturity and professional execution.

BuildSmart: Championing Sustainable Construction Through AI

Their published app, **BuildSmart,** is now available on **Huawei AppGallery,** supports sustainable construction practitioners by providing on-device materials analysis and carbon impact assessments. Key features include:

- On-device material identification (e.g., timber, glass, insulation)
- Instant embodied carbon scoring
- Recyclability insights and supplier references
- Cost estimation and eco-friendly material alternatives
- Lifecycle impact assessment, from manufacturing to installation
- Side-by-side comparison of design variants

By combining AI, environmental data, and sustainability principles, BuildSmart aligns closely with Malaysia's green technology agenda. The team's polished live demonstration, along with the successful app publication, earned them a Top 10 finalist ranking in Track B.

APU's Team **"Hello World!"** has accomplished something no team has achieved in the competition's history: placing in the Top 10 for both tracks simultaneously. This rare achievement speaks to their discipline, creativity, and ability to transition seamlessly from ideation and social innovation to technical development and market deployment.

Their success also highlights APU's strong culture of mentorship and its commitment to nurturing industry-ready innovators capable of addressing diverse societal and technological challenges.

Associate Professor Ir Dr Siva Kumar Sivanesan, Head of the School of Engineering, said, *"The outstanding performance by Team 'Hello World!' exemplifies the spirit of excellence we cultivate at APU. Their ability to excel in both conceptual innovation and technical execution is a testament to their versatility and the high standards upheld by our academic and mentorship ecosystem. We are immensely proud of their achievement, which sets a remarkable benchmark for future engineering and technology innovators."*

Well done to Team "Hello World!" for this remarkable dual success.
APU is truly proud of you!

APU Students Strike Double Gold at MaGIEx 2025 with Innovations That Improve Everyday Lives

Students from the Asia Pacific University of Technology & Innovation (APU) clinched **double gold** at the **Malaysia Grand Invention Expo (MaGIEx) 2025** with two impactful engineering projects aimed at improving road safety and empowering the visually impaired. Their achievements reinforce APU's strength in nurturing real-world innovators who tackle genuine societal needs.

Asia Pacific University of Technology & Innovation (APU) has once again demonstrated its capability in nurturing young innovators who design solutions with real-world impact, after its students secured a remarkable double gold victory at the Malaysia Grand Invention Expo (MaGIEx) 2025.

The first gold-winning project, CMORE, emerged from the collaborative effort of Artificial Intelligence and Mechatronic Engineering students, **Leong Yu Hang** and **Quek Kia Hau.**

Guided by their mentor, **Ir Ts Dr Reena Sri Selvarajan**, Senior Lecturer at APU's School of Engineering, the duo set out to address a long-standing challenge faced by the visually impaired: navigating safely and independently in unpredictable environments.

CMORE presents a next-generation assistive mobility device that integrates **LiDAR sensing**, AI-driven environmental analysis, and predictive haptic feedback to deliver full 360° spatial awareness.

Designed as either a chest-mounted device or a pair of smart glasses, the system detects dynamic and overhanging obstacles often missed by traditional mobility aids. By incorporating intelligent route planning, voice assistance, and a modular, accessible design, **CMORE** bridges a critical gap between conventional tools and modern smart-navigation technologies.

The result is a system that empowers the visually impaired community with enhanced independence, safety, and confidence demonstrating APU students' empathy-led approach to engineering innovation.

The second gold medal was awarded to **STEERX: AI Vision-Based Navigation for Safer Roads,** created by Mechatronic Engineering students **Ng Yan Hong, Pang Wei Meng, and Kevin Hoe Jian Vei**, who were also mentored by **Dr Reena**, whose expertise spans nanotechnology, biosensors, microelectronics, and AI for biomedical systems.

The trio engineered a compact and affordable system designed to reduce lane-change collisions across everyday vehicles in ASEAN.

Powered by an **NVIDIA Jetson Orin Nano** and a four-camera **Sony IMX307 configuration, STEERX** offers real-time lane detection, vehicle tracking, and blind-spot monitoring features typically found only in high-end vehicles. With its easy-to-retrofit design, the system presents practical applications for mass-market cars, buses, rideshare vehicles, and logistics fleets.

By supporting the United Nations' Sustainable Development Goals 3, 9, and 12, STEERX shows strong potential for wide societal impact, particularly in enhancing road safety and promoting sustainable transportation.

Winning two gold medals at MaGIEx 2025 underscores APU's standing as a hub for purposeful innovation. It reaffirms that transformative ideas are not bound by age or seniority, but by curiosity, courage, and the commitment to solve real challenges faced by communities. APU's engineering curriculum, research culture, and mentorship ecosystem continue to equip students with the mindset and technical expertise to create meaningful solutions.

Reflecting on the team's achievements, Dr Reena shared her admiration for the students' persistence and vision. "*These achievements demonstrate that innovation often begins with a single bold idea. With the right support, guidance, and belief in their own potential, students can develop solutions that create meaningful and lasting change.*"

"I am also deeply grateful to our Head of School, ***Assoc Prof Ir Dr Sivakumar Sivanesan,*** *for his steadfast encouragement and moral guidance, which have played a crucial role in making these successes possible,"* she concluded.

Heartiest congratulations to Dr Reena and the students for their outstanding success.
Your work continues to uplift APU's spirit of meaningful, real-world innovation.

IMechE Achievement 2025

APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS

Jonathan Cheong Eugene – IMechE Project Award

Jonathan Cheong Eugene is recognized for his outstanding work in developing a **ROS2-based autonomous mobile robot system powered by the Jetson Orin Nano.** His project integrates advanced sensor fusion techniques, combining 2D LiDAR, depth camera, and IMU data using an Unscented Kalman Filter to ensure reliable localization across varying environments and lighting conditions. The robot supports multimodal control, including traditional teleoperation, voice-command navigation, and touchscreen-based point-to-point destination selection, making it highly accessible to differently abled users.

Jonathan further implemented a locally running LLM for spoken interaction, enabling intuitive task execution and chatbot communication. His most innovative contribution is a custom Nav2 obstacle avoidance plugin utilizing YOLOv8 detections, enabling dynamic, object-specific collision handling a major improvement over current uniform inflation-based approach. His project reflects excellent technical depth, modular design, and practical application in human–robot interaction.

IMechE Achievement 2025

APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS

Amogha Seelan Balakrishnan Arun Seeralan – The Frederic Barnes Waldron 'Best Student' Award

Amogha Seelan is awarded for his exceptional leadership, technical innovation, and significant contributions to the engineering community. He has delivered impactful engineering solutions, including an autonomous agricultural drone spraying system using MAVLink-enabled failsafe control on STM32, smart farming IoT systems with automated irrigation and cooling, and advanced crop-health monitoring using multispectral vision. His UAV VR concept paper was published by Springer, marking a notable international academic contribution.

As **President of the IMechE Student Chapter** at APU, he successfully led over 18 major events, including the flagship PLC Southeast Asia Competition, elevating institutional visibility and cross-border collaboration. His technical expertise spans embedded systems, robotics, AI, control systems, CAD, and field engineering, while he also champions community education through STEM workshops and drone training. Amogha's distinguished blend of innovation, leadership, and societal impact exemplifies the qualities of a top-tier engineering role model.

IMechE Achievement 2025

APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS

Viman Vinesh – The Institution Best Student Certificate

Viman Vinesh is recognized for his exceptional engagement in engineering innovation, research excellence, and industry-relevant achievements. As an active committee member of the APU IMechE Chapter, he has contributed to over 25 impactful initiatives since 2024, demonstrating strong leadership and teamwork. He serves as a Technical Assistant at the CREDIT Research Centre, playing key roles in AI-driven drone systems, disaster-response robotics development (RescueAI), and operational digitalization through inventory dashboards.

His strong academic performance (CGPA 3.6) is complemented by IEEE publication success and certifications in cybersecurity, blockchain, and drone technologies. **Viman** has also excelled in major international innovation challenges, earning awards in Startup Weekend Malaysia, EthTaipei, the Lazada Business Challenge, EthSeoul, and Eth New Delhi for solutions spanning fintech, governance, and artificial intelligence. His flagship development, RescueAI, integrates VLM-based perception, secure telemetry, and real-time decision support, showcasing his passion for impactful engineering in humanitarian applications.

IMechE Achievement 2025

APU MALAYSIA STUDENT CHAPTER
Institution of MECHANICAL ENGINEERS

Zahra Mehboob Osman – The Institution Best Project Certificate

Zahra Mehboob Osman is awarded for her outstanding development of a smart and fully integrated precision agriculture monitoring system adaptable to hydroponic and soil-based environments. Her design centres on a TTGO LoRa V2 microcontroller encased in a custom SolidWorks-engineered housing, fitted with pH, EC, and temperature sensors for hydroponics and a 3-in-1 soil sensor for traditional farming. Using LoRa long-range communication, data is transmitted to a gateway, processed through a Raspberry Pi, and visualized on a user-friendly dashboard that tracks nutrient cycles, environmental conditions, and device location to support sustainable resource optimization.

Zahra extends her innovation into agricultural robotics by developing real-time segmentation-based AI models for harvesting automation of crops such as tomatoes, cucumbers, and lettuce, enhancing accuracy and productivity in farm operations. Her project highlights a strong commitment to advancing sustainable agriculture using integrated IoT and AI technologies.

IMechE Achievement 2025

Team, We-Cooked – First Prize Winners, PLC Competition 2025

Team, We-Cooked, representing Asia Pacific University (APU), achieved **first place** in the **PLC Competition 2025** organised by the APU IMechE Student Chapter Malaysia. The team consists of four dedicated engineering students: **Wai Chun Kit** (Team Leader), **Lee Yi Hong, Choo Zhen Yik, and Lim Wei Chen.** Their mentor, **Ts. Dr. Arun Seeralan Balakrishnan,** ALO of the **APU IMechE Student Chapter**, guided and supported the team throughout their journey to becoming champions.

Throughout the competition, they demonstrated strong proficiency in automation system design, applying advanced PLC programming concepts and innovative problem-solving strategies to deliver a highly efficient and well-engineered solution. Their work reflected excellent teamwork, attention to detail, and a solid understanding of industrial automation technologies.

This achievement not only highlights their technical capabilities but also showcases the quality of engineering education and hands-on skills developed at APU. The success of Team We-Cooked stands as a proud moment for the university and reinforces its commitment to nurturing future industry-ready engineers.

WORKSHOP

Exploring the Link Between Games and AI Innovation

On July 24th, 2025, students at Asia Pacific university (APU) gathered for an exciting and insightful workshop titled "**How Games Shaped the Modern AI: A Hands-on Workshop**", led **by Dr. Yew Weng Kean, Assistant Professor at Heriot-Watt University Malaysia.**

The workshop that was organised by **the IEM APU Student Section (IASS)** offered a unique blend of history, hands-on experience, and future-forward thinking, showing how games have played a pivotal role in shaping the AI technologies we use today.

The event began with a warm welcome **by Ir. Ts. Subhashini**, Senior Lecturer and Club Advisor for **IEM APU Student Section (IASS)** towards Dr. Yew Weng Kean and all participants.

Dr. Yew Weng Kean kicked off the session with a deep dive into the historical roots of AI, tracing its evolution from classic games like Chess and Go to modern machine learning systems. Students learned how these games served as experimental platforms for developing algorithms that now, power autonomous vehicles, recommendation systems, and more.

The highlight of the workshop was the interactive coding session. About 60 over students got to experiment with AI tools and simulations, observing how game strategies translate into real-world problem-solving. Pre-prepared code allowed participants to focus on learning concepts without getting bogged down in setup issues.

During this section, **Dr. Yew Weng Kean** gave personalised guidance to those who wanted a deeper understanding on the code provided. In addition, the facilitators were assisting those who faced technical errors.

In a concise but impactful segment, Dr. Yew Weng Kean showcased how AI is revolutionizing engineering, from robotics and automation to smart systems and predictive maintenance. This helped students connect gaming-based AI strategies to their future careers in engineering.

The workshop wrapped up with a lively Q&A, where students asked questions, shared ideas, and discussed the ethical and practical implications of AI. The open dialogue fostered a sense of community and curiosity among attendees.

Sarah Wong Pei Li, a 1st Year Diploma in Mechatronic Engineering Student reflected on how well the workshop was ran, stating that *" his explanations, which helped me stay focused and understand what was going on.*

She added that "*I loved that the code was prepared beforehand, so we didn't have to fuss over it. The facilitators were helpful when I faced issues, which made the experience smooth and enjoyable. I'm looking forward to the next one!"*

Another insight was provided by **Aanjaey Raam Perumal Samy**, a 1st Year Computer Engineering Student who said that "*the workshop was like playing a level in a game*". *I did not know that gaming could be so educational with regards to AI. The workshop was like playing a level in a game; educational, engaging, and full of joy! Learning felt like an adventure I didn't want to end, thanks to the blend of history, technology, and application*."

A fellow engineering student **Lau Yijie**, a 1st Year Mechatronic Engineering Student expressed that, "*I personally think that the workshop was conducted in an interesting way where we were able to get hands-on with the programming and coding. Hearing information about AI from a professional really helped answer some of my curiosity about AI*."

The event ended with a closing ceremony where a gift of appreciation from APU's representative, **Ir. Ts. Subhashini** was presented to **Dr. Yew Weng Kean** for opening our minds on the correlation between games and how it played its huge role in shaping the modern AI.

Ir. Ts. Subhashini gave the following statement to express her gratitude towards Dr. Yew Weng Kean.

"Dr, Yew's ability to connect with students, simplify complex AI concepts, and make learning genuinely fun was inspiring to witness. The hands-on activities and real-world applications sparked curiosity and enthusiasm among our members, many of whom are just beginning their journey in engineering and computer science. It was especially rewarding to see students from different backgrounds actively participating, asking questions, and walking away with a deeper appreciation for the role of games in AI development. We're incredibly grateful to Dr. Yew for his time and expertise, and we look forward to more collaborations like this in the future."

SOE Students Level Up With Gen Ai Skills At Cognizant's Workshop

Thirty students from the School of Engineering (SoE) at Asia Pacific University of Technology & Innovation (APU) participated in Cognizant Sdn Bhd's flagship programme, "**AI for Impact: GenAI Prompt Engineering Workshop**" on 25th September 2025.

The delegation was coordinated by **Ir Ts Dr Reena Sri Selvarajan** (Senior Lecturer, SoE at APU) together with **Ms Nishrina Mohamed Jaffurula** (Executive, Student Engagement, Corporate Training at APU) and **Ms Suganya** (Executive, Industry Outreach, Corporate Training at APU).

The workshop, held as Cognizant's final generative AI (GenAI) training of 2025, brought together a diverse group of participants from various educational institutions, to which it created a dynamic environment for collaboration, shared learning, and practical, hands-on exploration of artificial intelligence (AI) concepts.

Students took an active role in the workshop, supported by Cognizant's trainers who introduced core concepts and facilitated various hands-on learning sessions:

1. Guided training on prompt engineering techniques, learning how to write effective, structured, and domain-specific prompts.
2. Real-world case studies, where students analysed AI-driven solutions used in financial services and other industry sectors.
3. Problem-based scenarios, requiring students to design prompts that solve practical challenges using GenAI tools.

To celebrate the successful completion of the programme, all participants were awarded digital badges (e-badges) and certificates, formally recognizing their newly acquired competencies in GenAI prompt engineering.

A highlight of the workshop was the practical segment, where students worked in teams across various tasks:

1. Complete hands-on exercises involving prompt experimentation, refinement, and optimization.
2. Develop AI-assisted solutions in response to real-world case challenges.
3. Present their outputs to Cognizant trainers and peers, demonstrating their understanding, creativity, and problem-solving abilities.

These micro-credentials not only serve as a mark of achievement, but also enhance their professional portfolios, signaling to future employers their readiness to tackle real-world AI challenges, whilst opening doors to exciting opportunities in the rapidly evolving world of AI and technology.

The workshop successfully demonstrated how practical learning and industry collaboration can prepare students for real-world challenges in AI.

Through expert guidance and hands-on experience, the workshop empowered students to gain both technical expertise and the confidence to apply AI solutions effectively.

Dr Reena conveyed her thanks to **Cognizant Sdn Bhd** for hosting the programme and to Corporate Training at APU for collaborating to provide meaningful, industry-relevant learning opportunities.

She highlighted the significance of such partnerships in bridging academic knowledge with professional practice, helping students build skills that meet the demands of today's digital economy.

APU Hosted International Workshop on Smart and Sustainable Agriculture Under Erasmus+ Grant

APU hosted **EUSAT 2025** under the **AGRHI project**, uniting global partners to explore smart farming and sustainable agri-tech, included workshops, demonstrations, and a Universiti Putra Malaysia (UPM) farm visit, highlighting APU's role in advancing agricultural innovation.

Asia Pacific University of Technology & Innovation (APU) successfully hosted **the International Workshop on Smart and Sustainable Agriculture (EUSAT APU 2025)** on 12 to 13 November 2025, bringing together global partners, researchers and industry leaders to explore cutting-edge advancements in agricultural technology.

Organised under the **Agricultural Revitalization in Higher Education Institutions (AGRHI)** initiative, the event forms part of a collaborative project co-financed by the Erasmus+ programme of the European Union.

The workshop featured participation from distinguished academic partners including Vellore Institute of Technology (India), Anna University (India), COEP Technological University (India), Eastern University and the University of Jaffna (Sri Lanka), University of West Attica (Greece), Middle East Technical University (Türkiye), Institute Maszyn Przepływowych PAN (Poland), Universiti Malaysia Pahang (UMP), and APU itself.

Industry experts and technology innovators contributed to the two-day programme, which focused on modern approaches to precision farming, including drones, IoT-based monitoring, robotics, and data-driven crop management, alongside sustainable practices to boost productivity while minimizing environmental impact.

Day one began with guest registration and opening remarks by **Professor Ir EUR ING Dr Vinesh Thiruchelvam,** APU's Chief Innovation & Enterprise Officer and **Ts Suresh Gobee,** APU's Senior Lecturer at the School of Engineering (SoE) and Head of the Asia Pacific Centre of Robotics Research (APCoRE).

This was followed by a series of technical workshops conducted by leading industry partners such as City Farms, Alpha-Swift, ViTrox AgriTech, and JP Global Engineering, offering participants hands-on insights into emerging agri-tech solutions and their real-world applications.

In the afternoon, delegates toured the AGRHI Hub for live technology demonstrations and later joined a guided campus tour to experience APU's facilities and innovation ecosystem.

The day concluded with the AGRHI ERASMUS+ Dialogue and Meeting, aimed at strengthening collaboration and aligning future development activities across partner institutions, followed by a closing session and tea break.

On the second day, participants visited a farm at Universiti Putra Malaysia (UPM), a leading agricultural research institution.

The visit offered a firsthand look at agri-tech solutions deployed in an operational farm environment, including automated monitoring systems, IoT-based soil and crop sensors, precision irrigation technologies and data-driven platforms used to optimise resource usage and enhance crop performance.

This practical exposure enabled delegates to see how digital agriculture frameworks are applied at scale, reinforcing the essential link between research, technology deployment, and field-level operations.

EUSAT APU 2025 reaffirms APU's commitment to promoting sustainable, technology-driven agricultural practices.

By providing a platform for collaboration among academics, industry leaders and international partners, the workshop strengthens shared efforts to build smarter, greener and more resilient agricultural systems.

The event further establishes APU as a rising regional hub for forward-looking agricultural innovation, aligned with the consortium's vision of **"Collaborating for a Greener Tomorrow."**

Special thanks to the committee members **Ts Suresh Gobee** (Lead**), Ts Dr Maythem Kamal Abbas Al-Adilee** (SoC), **Dr Adeline Sneha John Chris** (SoE), **Mr Muhammad Danish Mohd. Johari** (SoF), **Ts Dr Arun Seeralan Balakrishnan** (SoE), **Ms Fatin Ayuni Mohd. Suhaimi** (SoE), **Ms Shamini Patpanavan@Pathmanathan** (SoE), **Mr Muhammad Syahmi Afif Mokhtar Yazid** (SoE), as well as Ms Vickneswari Durairajah, Ph.D researcher under Erasmus, for making this event a success.

EVENTS

China's SUST Students Embark on a Cross-Border Study Programme at APU

A group of Mechatronics Engineering students from **China's Shaanxi University of Science & Technology (SUST)** attended a week-long academic and professional development summer camp at **Malaysia's Asia Pacific University of Technology & Innovation (APU),** where they participated in workshops covering English, research methodology, and various technical topics, alongside cultural experiences that cemented a new partnership between the two universities.

Students from **China's Shaanxi University of Science & Technology (SUST)** recently jetted over to Malaysia for an enriching seven-day (18th to 24th August 2025) summer camp at the Asia Pacific University of Technology & Innovation (APU).

This collaborative programme blended academic rigour with cultural immersion, giving the Mechatronics Engineering students a taste of APU's teaching excellence and a glimpse into Malaysia's vibrant culture.

The SUST delegation dived into a series of hands-on workshops designed to boost their academic and professional skills.

Mastering English for Communication, a workshop led by Mr Foo Chwan Woei.

Ir Jacqueline Lukose guides students through a hands-on Design Thinking workshop, fostering problem-solving and creative solutions.

From an **English for Communication** workshop by **Mr Foo Chwan Woei** at the **Asia Pacific Language Centre (APLC),** to a School of Computing (SoC) session by **Dr Seyedmostafa Safavi** on cyber security, the students were put through their paces.

They also got stuck into the School of Engineering (SoE) workshops on **Design Thinking** by **Ir Jacqueline Lukose**, **Robotics** by **Ir Ts Dr Denesh Sooriamoorthy**, and **Research Methodology** by **Ir Ts Dr Alexander Chee Hon Cheong.**

Each workshop was crafted to be both meaningful and engaging, highlighting APU's unique approach of combining practical learning with international academic standards.

Ir Ts Dr Denesh leads a Robotics Workshop, helping students from SUST develop essential technical skills.

Dr Seyedmostafa Safavi guides students through a hands-on Cybersecurity Workshop, exploring crucial strategies to protect against digital threats.

Ir Ts Dr Alexander Chee guides students through a Research Methodology Workshop, a key component of the cross-border study programme, which will help them build a strong foundation for future projects.

Experiencing the best education and Malaysian culture

Beyond the classroom, the students fully immersed themselves in Malaysian culture.

Led by APU's Student Services **Ms Sha Yuxin**, they toured Kuala Lumpur's iconic landmarks, including the awe-inspiring Batu Caves.

They explored the city's architectural mix of modern skyscrapers and historic buildings and savored the diverse culinary scene.

These cultural outings were not just about sightseeing; they helped the students appreciate Malaysia's diversity, inclusivity, and global outlook values that sit at the heart of APU's educational philosophy.

The summer camp wrapped up with a ceremony where the students received certificates for their participation by **Ir Ts Dr Alexander Chee Hon Cheong, Assistant Professor at the School of Engineering (SoE).**

The event was not just a farewell; it marked the start of a lasting partnership founded on mutual learning and cultural exchange.

APU Young Engineers Make Their Mark at SOfE 2025

Emma Reese Hoff emerged as the champion of the **Speak Out** for Engineering (SOfE) Competition 2025, while **Shiddarrtana Soorace** and **Jocelyn Gresia** secured second and third places, respectively, with projects on robot-assisted surgery and theme park ride design. The finalists will advance to the next stage of the competition at the **University of Malaya (UM),** with the opportunity to represent APU on the international stage in the United Kingdom.

The Speak Out for Engineering (SOfE) Competition 2025, organised by the Asia Pacific University of Technology & Innovation (APU) in collaboration with the **Institution of Mechanical Engineers (IMechE),** offered a distinguished platform for aspiring engineers to showcase their technical expertise, professional communication skills, and innovative thinking.

Designed to enhance students' ability to explain complex engineering concepts with clarity and confidence, the competition bridges the gap between technical precision and audience engagement, empowering participants to communicate their ideas effectively to both specialists and non-specialists.

Spearheaded for years by **Professor Ir EUR ING Dr Vinesh Thiruchelvam,** Honorary Chair of IMechE Malaysia, guidance by **Associate Professor Ir Dr Siva Kumar Sivanesan**, Head School of Engineering (SoE), and facilitated by **Assistant Professor Ts Dr Arun Seeralan Balakrishnan**, Academic Liaison Officer; the event continues to cultivate engineers who combine innovative thinking with effective communication a skill set increasingly valued in academia and industry.

"*The ability to communicate complex engineering ideas with clarity and confidence is what truly distinguishes great engineers*," said **Professor Ir EUR ING Dr Vinesh Thiruchelvam.**

"*SOfE empowers our students to turn knowledge into inspiration, bridging innovation with real-world impact."*

Associate Professor Ir Dr Siva Kumar Sivanesan added, *"SOfE 2025 reflects APU's dedication to shaping well-rounded engineers, not only technically proficient but also articulate, confident, and ready to lead."*

This year's event saw participants deliver compelling presentations on research projects, technological innovations, and emerging engineering solutions, reflecting a strong grasp of both theoretical principles and real-world applications.

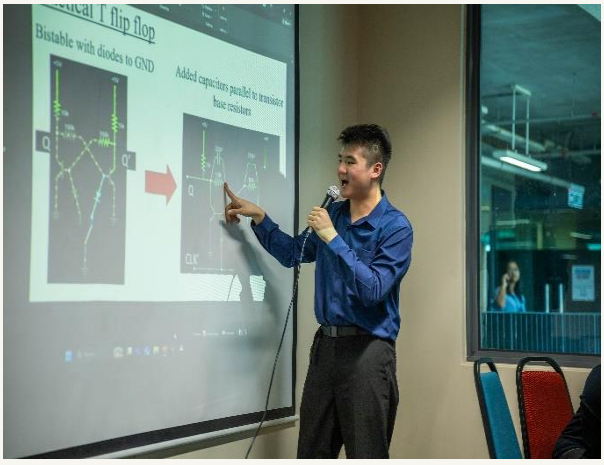
Judging the competition were **Ms Sharen Kaur**, Senior Manager of the Asia Pacific Language Centre (APLC), and **Ms Raziah Sultan Kabeer**, EPT and Training Coordinator, APLC.

Their expertise ensured that participants not only demonstrated technical accuracy but also mastered the art of presenting their ideas with professionalism and impact.

"Engineering brilliance means little if it cannot be communicated. The participants impressed us by presenting complex ideas with both clarity and confidence. That is true professional growth," said **Ms Sharen Kaur.**

From a highly competitive line-up, Emma Reese Hoff claimed first prize for her outstanding presentation on advancements in nanotechnology for materials engineering, showcasing how nanoscale innovations can enhance material strength, durability, and performance.

"Taking part in SOfE pushed me to see engineering beyond equations and designs. It is about communicating ideas that can change the world and that is an incredible experience," said **Emma Reese Hoff.**



The second prize was awarded to **Shiddarrtana Soorace** for her insightful analysis of robot-assisted surgical systems, exploring the mechanical design, kinematics, and precision actuation of robotic tools that improve surgical accuracy and reduce patient trauma.

Meanwhile, third prize went to **Jocelyn Gresia,** who impressed the judges with her creative application of mechanical engineering principles in theme park ride design, focusing on structural dynamics, load analysis, and motion simulation to enhance both realism and safety.

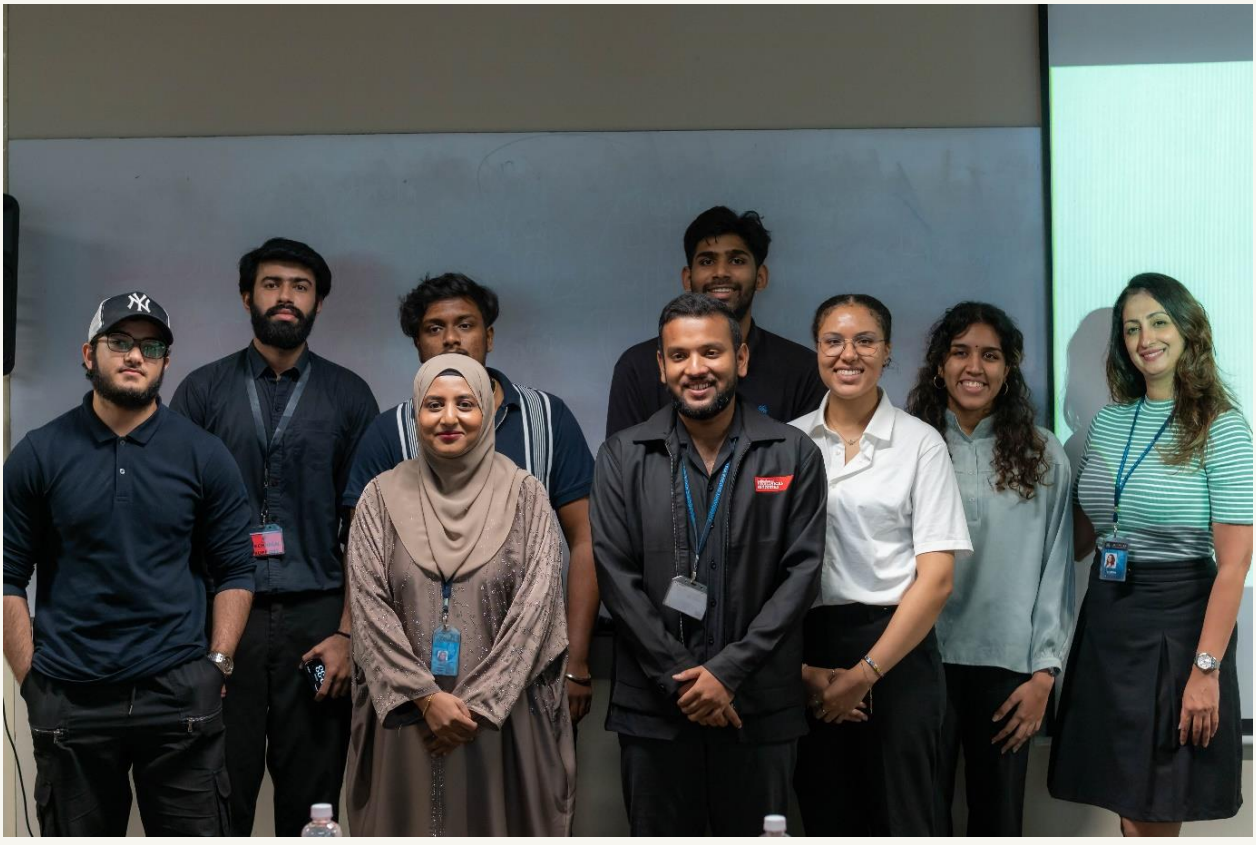
The finalists will advance to the next stage of the competition at the University of Malaya (UM), with the opportunity to represent APU on the international stage in the United Kingdom, reflecting the university's commitment to cultivating engineers who are technically proficient, globally competitive, and confident communicators.

SOfE 2025 underscored the importance of public speaking, technical communication, and professional excellence within engineering education.

It stood as a landmark celebration of talent, creativity, and innovation, reaffirming that APU engineers are ready to lead, inspire, and make their mark on national and global platforms.

The success of the event was made possible through the dedication of the **APU IMechE Student Chapter Organising Committee**, comprising **Amogha Seelan B.A, Sanjay Kumar, Ahmed Adam, Isameldin Ahmed Hussein Ahmed, Raveen Sangaran, Praveen Vikkram Arul Rajan, Shiddarrtana Soorace,** and **Emma Reese Hoff.**

Their teamwork, coordination, and professionalism ensured a seamless and engaging experience for all participants and guests, making the event truly memorable.



Eco Heroes in action

Recently, Asia Pacific University of Technology & Innovation (APU) **Society of Petroleum Engineers Student Chapter (APU SPE SC)** conducted a meaningful **Corporate Social Responsibility (CSR) tree planting mission** at the **Free Tree Society (FTS) Nursery Plant** in Kuala Lumpur.

Under the guidance **of Ir Dr Wong Siew Fan** (Senior Lecturer, School of Engineering at APU), this mission strengthened APU SPE SC's commitment to sustainability, environmental conservation, and experiential learning, aligning closely with **APU's Environmental, Social, and Governance (ESG) principles.**

The day commenced with a vibrant welcome by **Ms Lydia**, Programme Manager at FTS, accompanied by **Ms Emily**, Programme Assistant at FTS, who set the tone for an engaging day of learning, exploration, and environmental action.

Students were introduced to the purpose of the CSR mission, gaining a clear understanding of how tree planting contributes to long-term ecological well-being and supports broader sustainability efforts.
Following the introduction, the team from FTS took the students on a guided walk through the vibrant nursery grounds.

Along the way, students explored the historical, cultural, and environmental significance of various plant species, including medicinal herbs and century-old trees, to which it highlighted the relevance of native trees in preserving local ecosystems and sustaining future environmental balance.

The core activity of the day unfolded as students moved to the designated planting zone, where they were divided into smaller teams and guided through essential sustainable planting practices.

Under the supervision of the team from FTS, students learned proper planting techniques, soil and root preparation, composting methods, irrigation practices, and the use of organic materials to enhance soil health.

This hands-on experience allowed them to transform theoretical knowledge into practical skills, while deepening their appreciation for sustainable agriculture and long-term ecosystem care.

Following that, students exchanged insights on their learning experiences, discussed the environmental impact of their actions, and explored how small, consistent efforts can contribute meaningfully to ecological well-being.

A few perspective from students:

1. **Bany Zechariah Mangar Chol**, President of APU SPE SC: "*This mission was about more than planting trees, it was about planting hope, and witnessing our members' collective effort to create a meaningful environmental impact was truly inspiring.*"
2. **Levi Louis Mark Anthony,** Vice President of APU SPE SC: *"This mission was a powerful reminder that our collective actions shape a sustainable future, showing that planting trees is more than a task, it is a meaningful step toward addressing global ecological challenges."*
3. **Lucas Chiong Ju Wynne**, Committee Member of APU SPE SC: *"Participating in the tree planting opened my eyes to how practical skills and mindful actions can directly contribute to nurturing the environment, leaving a lasting impact on both nature and myself."*

Dr Wong highlighted that the tree planting mission offered students a unique opportunity to engage with environmental action firsthand, fostering a deeper understanding of climate action, biodiversity, and sustainable living.

"By participating in such hands-on activities, students not only strengthen their environmental awareness, but also develop a personal sense of responsibility toward creating a greener and more sustainable future."

APU Students lead Coastal clean-up and Community empowerment at Bagan Pinang

Recently, Asia Pacific University of Technology & Innovation (APU) **Society of Petroleum Engineers Student Chapter** (APU SPE SC) strengthened its commitment to environmental protection and community engagement through a coastal clean-up and **Corporate Social Responsibility (CSR)** initiative held at **Bagan Pinang, Port Dickson**.

Aligning with **Sustainable Development Goal 3, 12, 14, 15, and 17 (SDG 3, SDG 12, SDG 14, SDG 15, and SDG 17),** the initiative brought together around 30 students, focusing on creating a cleaner environment, supporting local communities, and promoting sustainable living; under the guidance **of Ir Dr Wong Siew Fan** (Senior Lecturer, School of Engineering at APU), whose leadership continues to drive impactful, sustainability-driven student initiatives.

With students arriving early at the designated meeting point, the day set off with a strong sense of purpose.

Students prepared their equipment, received briefings, and organised themselves into teams; setting the momentum for a hands-on mission to improve the coastal surroundings and engage meaningfully with the environment.

Core activities carried out during the initiative included:

1. Clearing litter and debris along public spaces
2. Sorting and managing waste responsibly

This clean-up not only improved the condition of the area, but also encouraged students to consider how everyday actions and responsible habits together support the broader goal of creating a cleaner and healthier planet.

Bany Zechariah Mangar Chol, President of APU SPE SC reflected on the meaningful impact of the coastal clean-up at Bagan Pinang, noting how the experience deepened students' appreciation for environmental responsibility.

"The coastal clean-up was far more than a simple act of community service; it vividly demonstrated how the power of collective effort can bring about tangible, meaningful change, reminding us that even modest individual actions, when multiplied across many people, have the potential to leave a lasting and significant impact on the environment."

Dr Wong also emphasized the importance of such hands-on efforts, highlighting how they bridge academic knowledge with practical application.

"The initiative gave students a meaningful opportunity to put their understanding of sustainability into practice, fostering responsibility, environmental awareness, and a collaborative spirit that will guide their contributions to society."


SPE
International
Asia Pacific University
SPE Student Chapter
A·P·U
ASIA PACIFIC UNIVERSITY
OF TECHNOLOGY & INNOVATION

Reflecting on the initiative's conducted by APU SPE SC, APU's Chief Innovation & Enterprise Officer **Professor Ir Eur Ing Ts Dr Vinesh Thiruchelvam,** shared that witnessing APU SPE SC evolve since its establishment has been both deeply rewarding and inspiring, as it has steadily transformed into a dynamic platform for student-led innovation and community engagement.

He noted that the students have continued to elevate in terms of activities in 2025 through their vibrant leadership, strong academic support, and unwavering commitment; demonstrating how dedicated student communities can drive meaningful, long-term impact that extends beyond the classroom.

APU Engineering Students Gain Industry-Ready Insights at the German-Malaysian Institute

On 3 December 2025, a group of engineering students from the Asia Pacific University of Technology & Innovation (APU) embarked on an immersive academic visit to the **German-Malaysian Institute (GMI)** in Taman Universiti, Kajang, Selangor.

The visit formed part of APU's continuous commitment to nurturing industry-ready graduates by extending learning beyond the classroom and exposing students to real-world engineering environments that shape modern professional practice.

Approximately 30 undergraduates participated in the visit, accompanied by Senior Lecturers from APU's School of Engineering (SoE), **Ir Ts Subhashini Gopal Krishnan** and **Dr Mukil Alagirisamy.**

Carefully curated to complement the students' academic pathway, the visit aimed to provide first-hand exposure to advanced manufacturing technologies and professional engineering standards practised within a globally recognized technical education institution.

Established through a joint initiative between the Governments of Malaysia and Germany, GMI stands as a benchmark institution for broad-based engineering education and advanced skills training, both theoretical and practical.

Governed by a 10-member Board of Directors comprising representatives from both governments, alongside public and industrial stakeholders, GMI plays a strategic role in strengthening Malaysia's skilled workforce.

The institute offers a diverse portfolio of programmes and services, including full-time diploma programmes, pre-university studies, skills upgrading technical courses, train-the-trainers initiatives, as well as industrial consultancy and technical services.

Its strong industry alignment and adherence to German engineering standards have positioned GMI as a gateway for students aspiring to pursue further education and professional opportunities in Europe, particularly within the engineering sector.

Upon arrival, APU students were briefed on GMI's history, mission and contributions to Malaysia's industrial ecosystem. The visit continued with a tour of the Industrial Design Gallery, where final-year projects by GMI graduates were showcased.

The exhibits featured innovative product concepts designed to address real-world challenges, reflecting a high level of technical competence, creativity and problem-solving ability.

A key highlight of the visit was the **Smart Factory ecosystem**; an on-campus simulation of an industrial production system developed in collaboration with leading industry partners.

Equipped with industrial-scale instruments and **Programmable Logic Controllers (PLC),** the facility demonstrated how automation, data exchange and intelligent control systems integrate to form efficient, autonomous production lines at the heart of the Industry 4.0 revolution.

The exposure enabled APU students to visualize how theoretical knowledge translates into operational excellence within a manufacturing context.

The delegation also toured GMI's distinctive hybrid classrooms, where lecture spaces are seamlessly integrated with heavy laboratory equipment.

This innovative learning environment allows students to apply theoretical concepts immediately through hands-on interaction with industrial machinery—mirroring professional engineering workflows and reinforcing practical competence.

The visit concluded at the **Robotics and Automation Laboratory**, where students observed industrial-grade robotic arms performing automated tasks.

Designed to replicate real manufacturing environments, the facility underscored the importance of training with professional-grade equipment to meet industry expectations upon graduation.

Reflecting on the experience, final-year Bachelor of Computer Engineering with Honours student **Durkesh Ravi Shankar** highlighted the value of witnessing classroom concepts come to life in an industrial setting.

"The exposure to industrial-scale automation has been invaluable. Seeing the convergence of German engineering standards with Malaysian talent was truly inspiring. Overall, it was a preview of the professional world we are all about stepping into," he shared.

The visit left students with a deeper appreciation of the practical applications of their studies, reinforcing their readiness to transition from academia into the engineering profession.

Acknowledging the significance of the visit, Head of the School of Engineering at APU, **Associate Professor Ir Dr Siva Kumar Sivanesan**, emphasized the value of such cross-institutional exposure.

"GMI stands as a respected peer education provider that offers complementary strengths to an engineering degree at APU. Through strategic exposure beyond our campus, our students gain broader perspectives, deeper industry awareness and greater confidence as they prepare to chart their professional pathways. These experiences are vital in shaping engineers who are not only technically competent, but also globally aware and industry ready," said Dr Siva.

Through initiatives such as this visit, APU continues to demonstrate its commitment to holistic engineering education one that empowers students with knowledge, exposure and perspective as they build meaningful and impactful engineering careers.

A Journey into Industrial Excellence at Top Glove

Recently, the School of Engineering (SoE) at Asia Pacific University of Technology & Innovation (APU) set out on an impactful industrial visit to Top Glove.

Under the guidance of **Ir Dr Wong Siew Fan** (Senior Lecturer, SoE at APU) and supported **by Ir Ts Subhashini Gopal Krishnan** (Senior Lecturer, SoE at APU), the visit provided students with valuable insight into the inner workings of one of the world's leading glove manufacturers.

The visit began at the Top Glove Tower, where students were welcomed by **Ms Farah Irdina Muhammad Nur Akmal**, Human Resources Executive at Top Glove.

She led an engaging tour of the headquarters, introducing students to the company's work culture, organizational structure, and the values that drive Top Glove's global success.

The session allowed students to gain a clearer understanding of how corporate departments collaborate to support large-scale manufacturing operations.

For the second part of the visit, students proceeded to Factory 25 (Top Glove's research and development centre), where Ms Ain, Production Engineer at Top Glove, guided students through the glove production line.

By observing the machinery, automation systems, and production flow, students were able to connect their classroom learning to real-world industrial processes.

The exposure highlighted key engineering elements such as process optimization, material handling, and operational efficiency within a large manufacturing environment.

For the third part of the visit, students went on an in-depth tour of several specialised laboratories, guided by **Ms Shobana Devi**, R&D Engineer at Top Glove.

Students explored the analytical, chemical, wastewater testing, and microbiological labs; each offering insights into the scientific foundations behind product quality and safety.

Through these observations, students learned how rigorous testing, environmental monitoring, and research-driven innovation ensure that every product meets global regulatory standards.

In the final part of the visit, students gathered for an interactive Q&A segment, where they engaged directly with Top Glove professionals to clarify concepts and discuss about industry expectations.

This interaction not only strengthened their understanding of industrial practices but also provided valuable exposure to the professional competencies required in engineering careers.

The industrial visit offered a meaningful bridge between academic learning and industrial application.

By observing operational systems, exploring research facilities, and engaging with industry professionals, students gained practical insights into process engineering, quality control, sustainability, and compliance within the glove manufacturing sector.

Beyond that, the experience also fostered personal growth, as students developed a greater sense of curiosity, improved their observational and analytical abilities, and cultivated an appreciation for learning through real-world experiences.

Engineering the Future

APU Brings Sustainable Innovation to GIIS Kuala Lumpur Students Through a Knowledge-Transfer Mission to Inspire Future Engineers

From 25 to 27 November 2025, the School of Engineering (SoE) at the Asia Pacific University of Technology and Innovation (APU) carried out a comprehensive three-day knowledge-transfer workshop for Year 11 students at the **Global Indian International School Kuala Lumpur (GIIS KL).**

Set in Brickfields, Kuala Lumpur's vibrant enclave affectionately known as "Little India"; the initiative welcomed around 40 enthusiastic learners eager to explore the world of sustainable engineering and emerging research trends.

Designed as an educational bridge between secondary school learning and university-level engineering, the programme offered a stimulating introduction to modern engineering challenges, future technologies, and real-world applications. The workshop's aim was clear: to ignite curiosity, empower young people with technical insight, and inspire them to consider engineering as a meaningful and future-ready profession.

The workshop was spearheaded **by Dr Mukil Alagirisamy**, Senior Lecturer at the School of Engineering, whose leadership set the direction for a series of expert-led sessions. She was joined by her colleagues, **Associate Professor Ir Dr Siva Kumar Sivanesan**, Head of SoE; Senior Lecturer **Ir Ts Dr Yvette Shaan-Li Susiapan**; Associate Professor **Ts Dr Sathish Kumar Selva Perumal**; and Assistant Professor **Ir Ts Dr Denesh Sooriamoorthy**. The academic team delivered lectures and activities tailored to spark interest among young learners.

Day 2 opened with a research-driven session led by **Dr Sathish Kumar**, titled **"Magic Materials That Help Find Cancer".** Students were introduced to metamaterials, biosensors, and advanced diagnostic technologies. The session illuminated how engineering breakthroughs are transforming medical imaging, improving early tumor detection, and ultimately saving lives. This compelling intersection of engineering and healthcare captured the students' imagination and showcased the diverse impact of engineering research.

Following this, **Dr Yvette** conducted a lively interactive quiz covering UAVs, EVs, and metamaterials. The friendly competition fostered teamwork and reinforced key concepts from the earlier sessions, adding an engaging and energetic element to the workshop.

The first day featured a captivating session by Dr Mukil titled **"Signal Processing in Unmanned Aerial Vehicles and its Sustainability".** Students explored how UAVs utilize sensors, signal processing, and autonomous navigation systems to support disaster response, environmental monitoring, and efficient logistics. The discussion translated complex engineering principles into relatable, real-world scenarios.

The introduction to Sustainability in Engineering further expanded the learners' understanding of today's environmental challenges, climate change, resource depletion, and the pressing need for clean technologies. Examples such as renewable energy systems and eco-friendly transportation made the concepts accessible and relevant.

Dr Denesh then introduced the **fundamentals of Electric Vehicles (EVs),** presenting battery systems, charging technologies, and the environmental advantages of clean energy. His talk on solar and wind energy offered a grounding in renewable power generation, highlighting their role in reducing carbon emissions. Visual demonstrations made these advanced topics digestible and memorable, leaving students inspired by the possibilities of sustainable innovation.

The final day was dedicated to helping students connect their new knowledge to future academic and career opportunities. **Dr Yvette** delivered an insightful overview of APU's Engineering Programmes, highlighting available specializations, industry collaborations, internships, and career pathways. For many students, this session provided valuable clarity on what it means to pursue engineering at the tertiary level.

A Certificate Distribution Ceremony followed, acknowledging each participant's enthusiasm and commitment. In her closing remarks, **Dr Mukil** expressed gratitude to the school's leadership and teachers, and presented a token of appreciation to the Principal, reinforcing the growing partnership between APU and GIIS KL.

The three-day workshop proved to be a meaningful and transformative experience. Students not only gained hands-on exposure to sustainable engineering concepts and cutting-edge technologies but also developed a deeper appreciation for how engineering shapes society and enhances quality of life.

By blending expert insights, interactive discussions, and research-focused content, the programme succeeded in nurturing curiosity and motivating students to explore engineering as a future profession. In delivering this knowledge-transfer initiative, APU's School of Engineering reaffirmed its commitment to empowering the next generation of innovators; one classroom at a time.

APU Strengthens Global Engineering Links with Taiwan's National Chung Cheng University

Asia Pacific University of Technology & Innovation (APU) recently welcomed a distinguished academic delegation from **Taiwan's National Chung Cheng University (CCU)** and its **Advanced Institute of Manufacturing for High-tech Innovations (AIM-HI),** marking a significant milestone in strengthening international partnerships in engineering education and research.

The visit, held on 11 December 2025 and led **by Professor Yong-Song Chen,** Division Head of International Cooperation & Exchange at CCU, provided a strategic platform for in-depth discussions on collaborative opportunities in smart manufacturing and green technologies, key areas shaping the future of sustainable innovation and advanced engineering.

More than a courtesy call, the visit was designed to offer an eye-opening opportunity for students by fostering international exposure and enabling them to develop global competencies that are increasingly essential in today's interconnected world.

The engagement reflects a shared commitment by both institutions to prepare future-ready graduates who can thrive across borders and industries.

The visit was coordinated and organised by **Ir Dr Yvette Shaan-Li Susiapan**, Lead Coordinator for Transnational Education Programmes at APU, whose leadership ensured a productive and meaningful exchange between both parties.

The AIM-HI delegation was joined by Ms Yi-Chieh Yen, Project Coordinator for Education & Training, and was warmly received by APU's leadership and engineering academics.

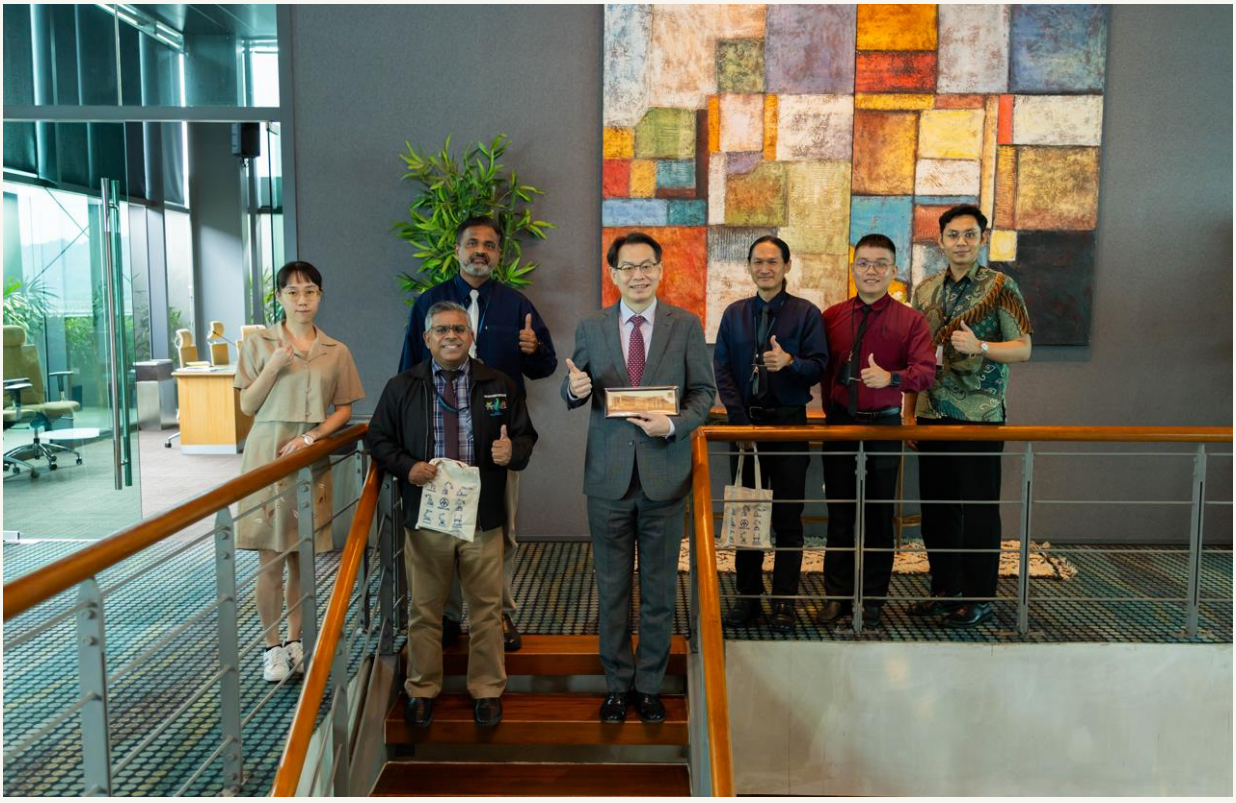
Representing APU were **Professor Ir EUR ING Dr Vinesh Thiruchelvam,** Chief Innovation & Enterprise Officer; **Associate Professor Ir Dr Siva Kumar Sivanesan**, Head of the School of Engineering; **Assistant Professor Ir EUR ING Ts Dr Lau Chee Yong**, Head of Visionary AI Studio; and **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong,** Programme Leader for the School of Engineering.

A key highlight of the visit was the introduction of the **Taiwan Experience Education Program (TEEP)** by the **AIM-HI delegation**. Unlike conventional internships, TEEP immerses students in a research-driven ecosystem, allowing them to work alongside leading academics and industry experts on real-world projects in smart manufacturing, green technologies, and high-tech innovations.

Beyond technical training, the programme places strong emphasis on cross-cultural learning. Participants gain access to state-of-the-art laboratories, cutting-edge tools, and collaborative research platforms, while developing critical thinking, innovation, and problem-solving skills essential for future leadership roles.

The delegation underscored that TEEP is more than an internship; it is a gateway to global networking, academic collaboration, and impactful research. For APU students, this initiative presents a unique opportunity to gain international exposure and hands-on experience within Taiwan's advanced engineering and technology sectors.

Insights shared during the bilateral discussions also provided valuable perspectives on international career pathways, joint research initiatives, knowledge-sharing programmes, and academic exchanges that are expected to benefit both institutions and contribute to regional technological progress.



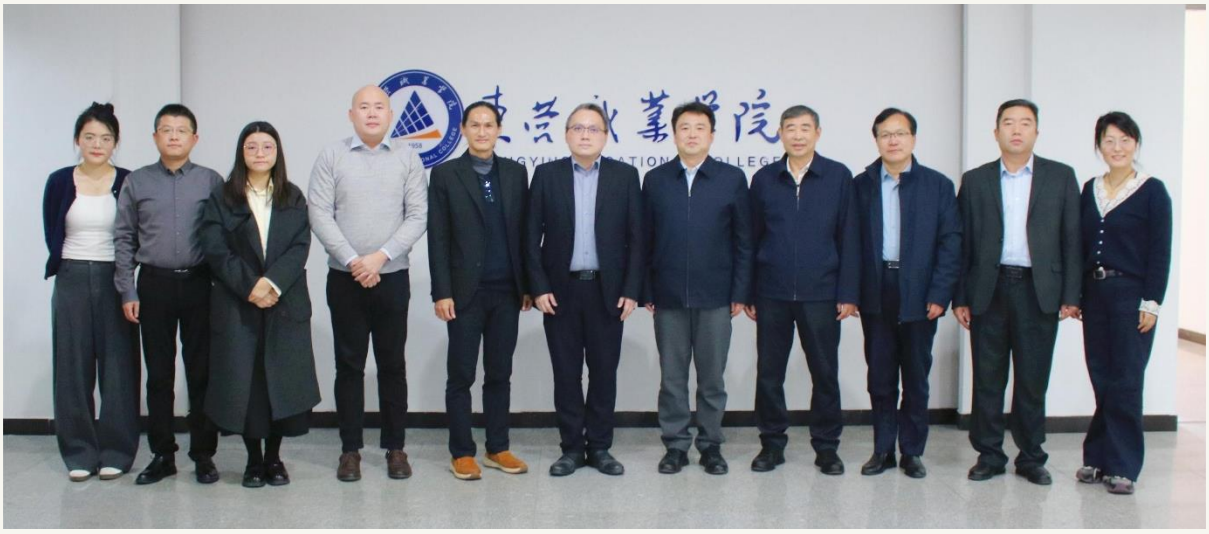
This visit reflects APU's strategic vision of cultivating a truly international learning environment through meaningful global partnerships.

"Collaborations with esteemed institutions such as CCU's AIM-HI enable us to transcend geographical boundaries in education and research," said Professor Vinesh Thiruchelvam.

"Through these partnerships, APU continues to expand pathways for high-impact research, knowledge exchange, and international experiential learning, empowering our students and academics to remain globally relevant, innovative, and at the forefront of technological advancement."

APU Strengthens Global Collaboration with DongYing Vocational College

APU strengthened its ties with DongYing Vocational College (DVC), China, during a visit led by **Associate Professor Dr Thang Ka Fei**, Senior Head of the School of Technology (SoT), with the delegation including **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong**, who was appointed as an Adjunct Professor, and featuring the unveiling of the Overseas Study Training Base and a dedicated workshop, facility tours, and in-depth discussions on applied education and research aimed at enhancing student learning and strengthening China–Malaysia academic collaboration.



Asia Pacific University of Technology & Innovation (APU) continued to advance its internationalization strategy and commitment to applied, industry-relevant education through a strategic academic engagement with **DongYing Vocational College (DVC),** China.

The APU delegation, led by **Associate Professor Dr Thang Ka Fei**, Senior Head School of Technology (SoT) included **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong**, Programme Leader for the Bachelor of Mechanical Engineering School of Engineering (SoE); Mr Loong Say Siang, Manager of International Development, Student Services and Marketing; and Ms Elaine Ngan Ei Lin, Student Services Executive.

They were warmly welcomed by Mr Xie Tao, President of DVC, during the unveiling ceremony of the DongYing Vocational College Overseas Study Training Base, alongside his senior colleagues.

The visit featured a series of high-level academic exchanges, institutional discussions, and formal ceremonies that strengthened the long-term collaboration between the two institutions.

A key milestone was the formal recognition of the Overseas Study Training Base, established to support international cooperation in applied education.

This platform will host joint applied education programmes, short-term workshops, research-led teaching initiatives, and talent development pathways.

"The Training Base represents an exciting opportunity to bring students and faculty closer to industry practices, bridging the gap between theory and real-world application," said Associate Professor Dr Thang Ka Fei.

"It will enhance curriculum relevance, encourage mobility, and align learning outcomes with industry needs in both Malaysia and China."

During the engagement, representatives from APU and DVC held in-depth discussions on applied education models, talent cultivation, and practice-oriented research collaboration, reflecting a shared vision to integrate teaching, research, and industry engagement within a sustainable international framework.

This collaborative discussion was further reinforced during the MoU signing ceremony, where Dr Thang represented APU Vice-Chancellor Professor Dr Ho Chin Kuan, formalizing the partnership and reaffirming APU's commitment to strengthening institutional ties and advancing sustainable international collaboration.

Another highlight was the Appointment Ceremony, during which **Assistant Professor Ir Ts Dr Alexander Chee Hon Cheong** was formally appointed as an **Adjunct Professor** at DVC, recognizing his expertise in applied engineering education, digital learning, and industry-linked research.

Dr Alexander was an academic specializing in engineering education and innovation and was recognized for his contributions both within APU and nationally, receiving a **National Outstanding Innovator Award (Honourable Mention)** at the **Private Education Excellence Awards 2025.**

He was also certified as a **ZEISS Metrology Trainer**, helped pioneer metrology education in Malaysia, and participated in international academic and educational events, including speaking on digital learning at a UNESCO and UNICEF forum.

Following the appointment, the '**Ir Ts Dr Alexander Chee Hon Cheong** Workshop' was unveiled at DVC, serving as a dedicated base for research, professional training, and industry collaboration.

The workshop is designed to support practice-oriented projects, staff development, and student engagement in real-world engineering and technological challenges.

The delegation also toured DVC's applied manufacturing and intelligent production facilities, where faculty showcased student projects, precision-manufactured components, and hands-on training outcomes.

"Seeing these facilities in action highlights the importance of skills-based education and the incredible potential of applied learning when aligned with industry standards.

"It was inspiring to witness the students' creativity and technical expertise firsthand," said Dr Alexander.

The visit concluded with a bilateral meeting to explore future collaboration, including joint programme development, applied research projects, professional training initiatives, and long-term talent development strategies.

Both institutions reaffirmed their commitment to transforming international academic collaboration into meaningful educational, research, and societal impact.

This engagement with DongYing Vocational College reflects APU's ongoing efforts to strengthen its global academic network and promote internationalised, industry-driven education through sustainable, outcome-focused partnerships.

APU SPE Student Chapter begins a new Leadership term

Recently, Asia Pacific University of Technology & Innovation (APU) **Society of Petroleum Engineers Student Chapter (APU SPE SC)** hosted its annual handover ceremony, a meaningful occasion that celebrated leadership, service, and continuity as the chapter transitioned into a new term (2025/2026).

Serving as a defining moment, the event connected the chapter's past accomplishments with a future full of promise and ambition.

The event brought together outgoing and incoming committee members, alongside esteemed academic leaders and lecturers from the Petroleum Engineering programme:

1. **Professor Ir Eur Ing Ts Dr Vinesh Thiruchelvam**, APU's Chief Innovation & Enterprise Officer
2. **Ir Dr Wong Siew Fan** (Senior Lecturer, School of Engineering at APU)
3. **Ir Eur Ing Ts Dr Harvin Kaur Gurchran Singh** (Assistant Professor, School of Engineering at APU)

Prof Vinesh highlighted that what truly sets the chapter apart is not merely the number of activities undertaken, but the strong values that guide each initiative and decision.

He noted that the committee members have consistently demonstrated leadership with purpose by integrating technical excellence with empathy, sustainability, and meaningful service to the community, reflecting a balanced approach to professional and social responsibility.

Echoing this sentiment, Dr Wong praised the chapter's dedication to advancing technical knowledge, while remaining socially and environmentally responsible, reminding committee members that their roles extend beyond organising events to becoming future changemakers within the petroleum engineering landscape.

She further emphasized that through consistent engagement in close to 20 impactful initiatives over the past year, committee members were able to translate classroom learning into practical industry exposure, while cultivating professionalism, teamwork, and a strong sense of responsibility to society and the environment.

Key highlights included:

1. APU & KL SPE Chapters Bring Joy to Raudhatul Al-faeez Orphanage.
2. Cultivating a Greener Tomorrow.
3. Experts illuminate Field Development Plan in the Oil and Gas Industry.
4. Empowering future Advocates through Environmental issues Training with Greenpeace.
5. Exploring Offshore Operations at Kemaman Supply Base.
6. Bridging Academia and Industry through Industrial Visit to Uzma Group and Deleum Berhad.
7. Bringing Smiles and Science to Teens Girl Home Shelter.
8. APU Students Participate in the PetroBowl Asia Pacific Regional Qualifiers 2025.
9. Eco Heroes in action.
10. APU Students lead Coastal clean-up and Community empowerment at Bagan Pinang.

Following it, **Bany Zechariah Mangar Chol**, outgoing APU SPE SC President, delivered a comprehensive presentation that brought the chapter's journey over the past term into clear focus, offering a structured overview of its progress and evolution.

He reflected on the collective effort required to sustain momentum throughout the year, acknowledging the dedication of committee members and volunteers who balanced academic commitments with organizational responsibilities.

As the event ended, **Dr Harvin** delivered a heartfelt address, expressing pride in the chapter's achievements and urging the new committee to build upon the strong foundation laid by their predecessors, to which her words also highlighted the importance of mentorship, resilience, and long-term vision in shaping effective student leaders.

With fresh leadership at the helm and a strong legacy to build upon, APU SPE SC now looks ahead to a new term filled with collaboration, innovation, and meaningful impact.

More than a ceremonial transition, the handover ceremony reaffirmed the chapter's mission to inspire, empower, and lead with integrity within the petroleum engineering community.

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