

PKE Engineering Capstone Design Exhibition 2024/2025 By Ms. Azwati Azmin Abdullah

eETD executive committee member for 2024/2025.

The School of Electrical Engineering, College of Engineering, Universiti Teknologi MARA (UiTM), Cawangan Pulau Pinang successfully organised the PKE Engineering Capstone Design Exhibition & Competition 2024/2025. This program was held as part of the EEE611 Integrated System Design (Capstone) course and aimed to provide a platform for final-year engineering students to showcase their innovative projects. The event also served to enhance collaboration between academia and industry professionals.

The event was made possible through the dedicated collaboration between the Institution of Engineers Malaysia (IEM) — Electronic Engineering Technical Division (EETD), the Institution of Engineering and Technology (IET) Malaysia, and UiTM Penang Branch. Their steadfast support continues to play a vital role in nurturing future-ready graduates capable of meeting industrial and technological demands. Figures attached illustrate the scene from the event during the commencement of the judging sessions, award ceremony, showcasing representatives from IEM and IET alongside the winning teams, capturing the spirit of achievement and partnership that defines this event.

The program was spearheaded by Ms Azwati Azmin as the Program Coordinator, with Dr. Rozan Boudville serving as the Resource Person. Their leadership ensured the smooth planning and execution of the event. The PKE Engineering Capstone Design Exhibition 2024 took place on 24th January 2025 at Perpustakaan Tun Abdul Razak (PTAR), UiTM Pulau Pinang branch. The program began with the registration of participants, followed by the arrival of guests and an opening address by the Head of Center, Electrical Engineering Studies, Ir. Assoc. Prof. Dr. Alhan Farhanah. The judging panel for the exhibition included distinguished industry and academic representatives. They brought their extensive expertise to evaluate the projects and provided valuable feedback to the students. The jury members were as follows:

- 1. Ir. Dr. Huzein Fahmi Hawari Chairman of the Institution of Engineers Malaysia (IEM), Electronic Engineering Technical Division (EETD)
- 2. Dr. Leow Cheah Wei Electronic Engineering Technical Division (EETD), Institution of Engineers Malaysia (IEM)

- 3. Dr. Azniza Abd Aziz Intel Microelectronics Sdn. Bhd.
- 4. Mr. Abdul Qayyum Abd Rashid Cytron Technologies Sdn. Bhd)
- 5. Mr. Fakrul Anuar Hamid Honeywell Aerospace Avionics (M) Sdn. Bhd.
- 6. Ts. Raziszi Ithnin MIMOS Berhad
- 7. Mr. Amir Effendy Muhammad Afifi Keysight Technologies Malaysia Sdn. Bhd.

A total of 28 groups participated in this exhibition, comprising 22 groups from course code Bachelor of Engineering (Hons.) Electrical And Electronic Engineering (CEEE200) and 6 groups from Bachelor of Electronics Engineering Technology (Industrial Electronics) (CEEE211). These students showcased a wide range of creative and technical solutions, reflecting the knowledge and practical skills acquired throughout their academic journey focusing in Internet of Things area.

In recognition of excellence in engineering design and innovation, several prestigious awards were presented to the most outstanding teams during the PKE Engineering Capstone Design Exhibition & Competition 2024/2025. The accolades included the IEM Innovation Excellence Award, Best Technical Innovation Award, Best Prototype Performance Award, Sustainable Design Award, Impactful Engineering Award, and Best Team Collaboration Award. These awards celebrated student achievements in areas such as innovation, design feasibility, sustainability, teamwork, and real-world application. The ceremony highlighted the significant contributions and creative solutions developed by final-year students as part of the EEE611 Integrated System Design (Capstone) course.



Figure 1: Student presenting their capstone project to industry panellists.



Figure 2: Student presenting their capstone project to industry panellists.



Figure 3: Student presenting their capstone project to industry panellists.



Figure 4: Student presenting their capstone project to industry panellists.



Figure 5: Student project booths showcasing technical innovations.



Figure 6: Award presentation to winners of the Best Technical Innovation Award.



Figure 7: Award presentation to winners of the Best Prototype Performance Award.



Figure 8: Award presentation to winners of the Sustainable Design Award.



Figure 9: Award presentation to winners of the Impactful Engineering Award.



Figure 10: Award presentation to winners of the Best Team Collaboration Award.



Figure 11: Award presentation to winners of the IEM Innovation Excellence Award.



Figure 12: Group photo with judges, students, and organising committee.



Figure 13: IEM exhibition booth.