BULETIN FKA

UNIVERSITI TEKNOLOGI MARA

Cawangan Pulau Pinang
Kampus Permatang Pauh

EDISI 2025

PENGAJIAN KEJURUTERAAN AWAM

UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG







Message from Ketua Pusat Pengajian



Assalamualaikum Warahmatullahi Wabarakatuh and greetings,

It is a pleasure to welcome you to the 2025 edition of Buletin FKA. This bulletin brings together the activities, achievements and memorable moments of the School of Civil Engineering, UiTM Cawangan Pulau Pinang throughout the year.

Looking back, 2025 has been a meaningful year for our School. While the achievements recorded in this bulletin deserve recognition, I believe our true strength lies in the people behind them. Every programme, student activity, research initiative and community engagement reflects the time and effort contributed by our lecturers, administrative staff, technical staff and students.

As educators, our responsibility extends beyond delivering academic content. We must prepare our students to think carefully, act professionally and respond confidently to the challenges they will encounter as civil engineers. The engineering profession continues to change, and our students must be ready to work with new technologies while remaining attentive to public safety, environmental concerns and the needs of society.

I am particularly grateful for the cooperation shown by everyone throughout the year. Some contributions are clearly visible through awards, publications and successful programmes, while many others take place quietly behind the scenes. Both are equally important to the continued success of our School.

To our students, I encourage you to make full use of every opportunity available during your time at UiTM. Academic knowledge provides the foundation, but your willingness to learn, communicate and take responsibility will shape the kind of engineer you eventually become.

I would also like to thank our alumni, industry partners and collaborators for continuing to share their knowledge and experience with us. Their involvement helps ensure that our teaching and activities remain relevant to professional practice.

Finally, congratulations to the editorial team and everyone who contributed to this edition. I hope Buletin FKA 2025 will serve as a meaningful record of our shared journey and remind us of what we can accomplish when everyone contributes.

Thank you and Wassalam.

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A VISIT TO 33 kV STESEN SUIS UTAMA (SSU) IN UiTM PULAU PINANG

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On 20 October 2025, the course of Mechanical and Electrical Engineering under the code of program EC223 has organized a visit to the 33kV Stesen Suis Utama (SSU)in UiTM Pulau Pinang, with the consent from the Section of Facility Management, along with the facilitator that explain the almost all its functions to our students.

The 33kV sub-station is the main and primary distribution of power to the whole institution. No access is allowed unless with the consent of relevant authority. The power from TNB is first channeled to the KV sub-station before being distributed to all buildings within the boundary and stepped down as necessary for each structure.



The Gated 33kV sub-station



Inside view of the 33kV sub-station

Before entering the building, It is important to visit the transformers available at the back of the substation. There are three transformers, including one unit that functions as a backup. There are 2 types of transformers namely step-up transformer and step-down transformer. Can you guess which type is available?



Transformer with Gate and Lock



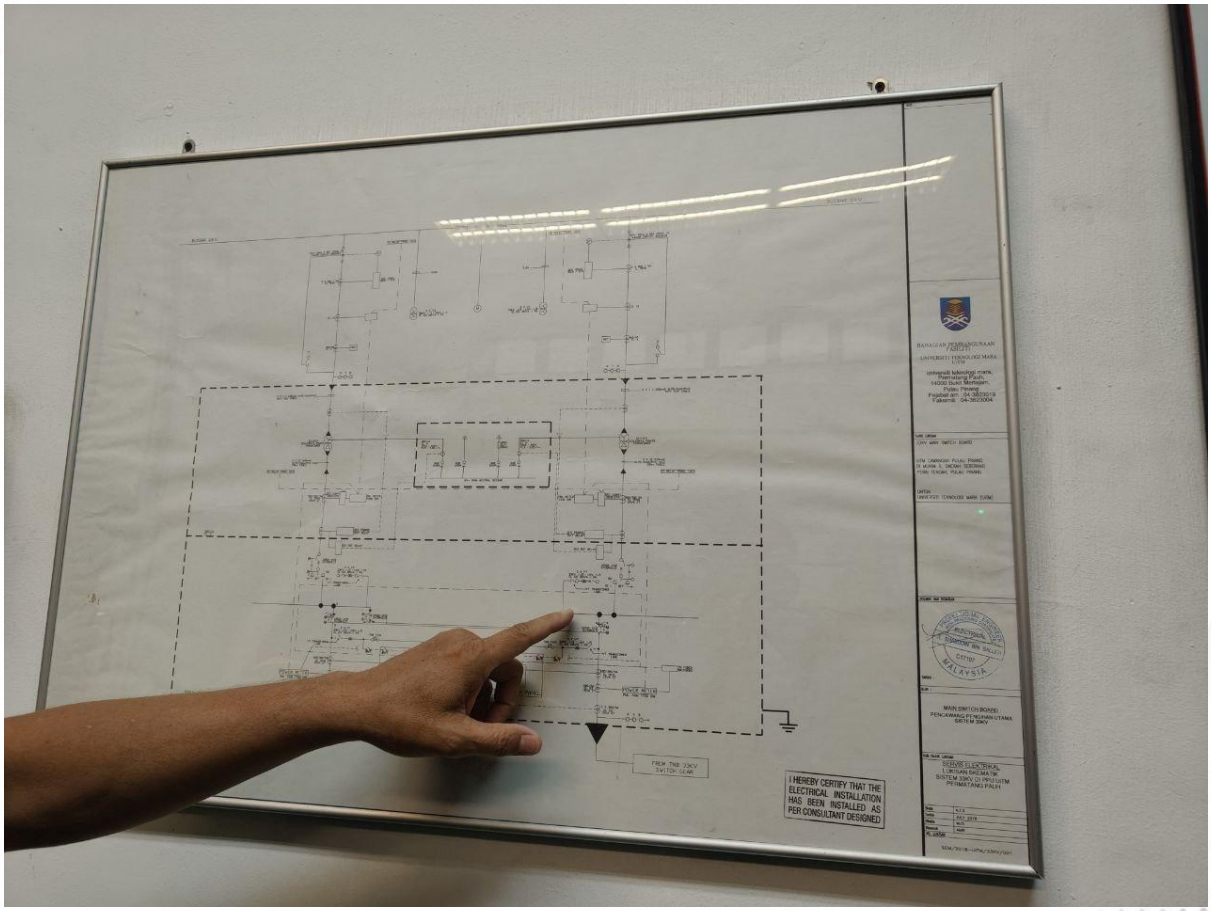
A Close View of Transformer

Inside the building is several pieces of equipment that function to distribute power to many locations in the institution. They are the tools between the 33kV and property that ensure the process of power transmissions.



Machine for Power Distribution

Before the end of the visit, let us have an overview of the schematic diagram of the sub-station. We hope that the visit increases students' interest in this course and helps them become better civil engineers and project manager in the future.



An Overview of the Power Schematic Diagram