

REFLECTIVE ELECTRICAL ENGINEERING LEARNING (REEL2026)

Building Skills and Professionalism through
Industrial Training

SKILLS



REEL2026
Reflective
Electrical Engineering Learning

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BUILDING SKILLS AND PROFESSIONALISM THROUGH INDUSTRIAL TRAINING



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*"Building Skills and Professionalism
through Industrial Training"*

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*Reflection transforms
experience into meaningful learning*

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Translating Academic Knowledge into Engineering Practice: Industrial Training Experience at Malaysian Timber Industry Board (MTIB)

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My internship at Malaysian Timber Industry Board (MTIB) in Kuala Lumpur has bring me with a valuable experience to transform theoretical knowledge into practical skills with a real working environment. During first few weeks of my internship, I was introduced to a lot of tasks, such as reviewing asset insurance documentation for electrical equipment to support maintenance and inspection activities. These experiences make me understand that engineering is not only about technical work but also involves documentation, asset management, and ensuring the reliability and safety of electrical systems in an organization. This valuable experience taught me a lot that engineering is just not a technical skill but more than that.

In addition, I was given the opportunity to assist in routine maintenance activities and observe how engineers communicate and coordinate with technicians during troubleshooting processes. Through these experiences, I learned the importance of teamwork, problem-solving, and effective communication in ensuring that maintenance work could be completed efficiently and safely. I also realized that good cooperation among team members is essential in achieving successful engineering operations and maintaining a productive working environment.

In other hand, one of the most significant experiences of my internship was the opportunity to engage in hands-on technical work. I am involved in inspecting and maintaining lighting systems, assembling electrical extension sockets, and repair faulty plugs. These tasks can improve my understanding of wiring systems, component functions, and troubleshooting. I learned the importance of precision and awareness to detail aspect, especially when I learned to construct and connect live, neutral, and earth connections. Through these valuable practical experiences, from day to day I get confidence in applying electrical principles and am aware of safety procedures and industry standards.

As presented in Figure 1, it shows I am handling a faulty plug inspection with my supervisor's guidance. I carefully inspected the internal wiring of the plug and made sure that the connections were secure and properly arranged. To adjust and fix any loose wires, basic tools were used to plug and to make sure it was safe and functioning properly.

Moreover, to the technical skills exposure, I was introduced to critical infrastructure systems such as server rooms, air conditioning units, communication systems and PABX and DVR by my supervisor. In other hand, observing maintenance work on cooling systems and understanding the behavior of devices like earth leakage relays enhanced my awareness of system protection and environmental control. I am also involved in project planning through the preparation of site drawing and Gantt charts. These emphasize the importance of time management and coordination in engineering projects. These experiences developed my perspective on the multidisciplinary nature of electrical engineering in real-world applications.



Figure 1: Faulty Plugs Inspection

Overall, this industrial training experience has led to my professional growth by bridging the space between theory and practice. I have learned and developed my soft skills such as communication, responsibility, and professionalism through tasks like report writing, video documentation, and building a professional online presence. This journey has created the importance of continuous learning, adaptability, and adherence to safety and ethical standards. I am now more prepared and confident to pursue a career in electrical field.

Authors' Biography



Ahmad Mierza Aqil bin Mohd Tarmin is a committed student pursuing a Diploma in Electrical (Electronics) at UiTM Permatang Pauh, Pulau Pinang Branch. As part of his academic journey, he is currently undergoing industrial training at Malaysian Timber Industry Board (MTIB) from March 2nd 2026, to June 26th 2026. This practical exposure enables him to translate theoretical concepts into real-world applications while enhancing his technical competencies in electrical and electronic engineering. Driven by a strong interest in technology, he aspires to make meaningful contributions to industry and develop a competent and skilled engineering professional.



Ida Rahayu binti Mohamed Noordin has accumulated 18 years of experience in the field of Electrical Engineering since joining Universiti Teknologi MARA Cawangan Pulau Pinang in 2007. She holds a Bachelor of Engineering (Hons.) in Electrical from Universiti Teknologi MARA Shah Alam, awarded in 2006, and a Master of Science in Electronic System Design Engineering from Universiti Sains Malaysia, completed in 2010.

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