

REFLECTIVE ELECTRICAL ENGINEERING LEARNING (REEL2026)

Building Skills and Professionalism through
Industrial Training

SKILLS



REEL2026
Reflective
Electrical Engineering Learning

REFLECTIVE ELECTRICAL ENGINEERING LEARNING

BUILDING SKILLS AND PROFESSIONALISM THROUGH INDUSTRIAL TRAINING



REEL 2026

REFLECTIVE ELECTRICAL ENGINEERING LEARNING

*"Building Skills and Professionalism
through Industrial Training"*

Copyright © July 2026

Electrical Engineering Studies
Universiti Teknologi MARA Pulau Pinang Branch
Permatang Pauh Campus

All rights reserved. No part of this e-magazine may be reused, republished, or reprinted in any form or by any electronic or mechanical means, including photocopying and recording, without prior written permission from the publisher.

eISSN

3093-7027

Published by

Diploma in Electrical Engineering
Electrical Engineering Studies
Universiti Teknologi MARA Pulau Pinang Branch
Permatang Pauh Campus
13500 Permatang Pauh
Pulau Pinang, Malaysia

This e-magazine is published annually

DISCLAIMER



*Reflection transforms
experience into meaningful learning*

The content displayed in this e-magazine is the intellectual property of the Electrical Engineering Studies, UiTM Pulau Pinang Branch (PKE UiTM CPP). Without written consent, no part of this publication may be reused, republished, or reprinted in any form or by any means.

All information published in REEL 2026 is intended solely for educational and informational purposes. The views and opinions expressed are those of the individual authors and do not necessarily reflect the official stance of PKE UiTM CPP or Universiti Teknologi MARA.

The editors and publisher are not responsible for any inaccuracies, omissions, or outcomes resulting from the use of the information provided.

From Student to Trainee: My Industrial Training Reflection

Muhammad Amzar bin Mahadzar, *Shahilah binti Nordin
Faculty of Electrical Engineering, Universiti Teknologi MARA Cawangan Pulau Pinang,
Permatang Pauh, Malaysia

*Corresponding author's email: shahilah879@uitm.edu.my

Before I started my industrial training, I imagined industrial training like on social media, where I just sat in an office and used a laptop. Through this industrial training, I realized that my perception was completely wrong. This industrial training is not just about working in an office, but many real-world skills can be acquired including the knowledge to adapt to different work environments. Indirectly, this experience made me realize how much sacrifice a father has to make in his daily routine of waking up early to work to support his family.

On my first day of industrial training at AMC Cincaria Sdn. Bhd., I gained a lot of new experiences and a different remote working environment compared to my previous part-time job at KFC. The environment here was significantly stricter and more professional with higher expectations in terms of discipline, communication and work performance. During the first day of internship, I attended an orientation session with other interns which provided an overview of the company, its activities and the rules and regulations that needed to be strictly observed in the workplace. One of the important lessons during the internship was learning about electrostatic discharge (ESD) which plays a crucial role in ensuring safety and protecting sensitive equipment in the workplace.

Another interesting experience during my industrial training was learning how work instruction is implemented in a real manufacturing environment. At AMC Cincaria Sdn. Bhd., every process follows a detailed standard operating procedure (SOP) to ensure product quality, safety, and consistency. For example, I need to follow every step in the packaging and inspection procedures such as sorting components, weighing products and following the safety requirements set out in the work instruction sheet. This taught me the importance of precision, teamwork, and quality control in the manufacturing industry.



Figure 1: Work Instruction for Packaging and Quality Inspection Procedure

There were many departments at the company, for example production 1 and 2, engineer team, head of department, manager, quality assurance team, and technician. I was assigned to production 2 which is called P2 for short form. Production 2 usually handles the packaging stage at the end of the production process. For example, each day I was assigned to prepare boxes for the products to be placed in followed by packing and preparing them for the shipping process. To ensure that workflow remains consistent and production goals are achieved within the set timeframe, production targets for the number of units to be completed each day need to be set.

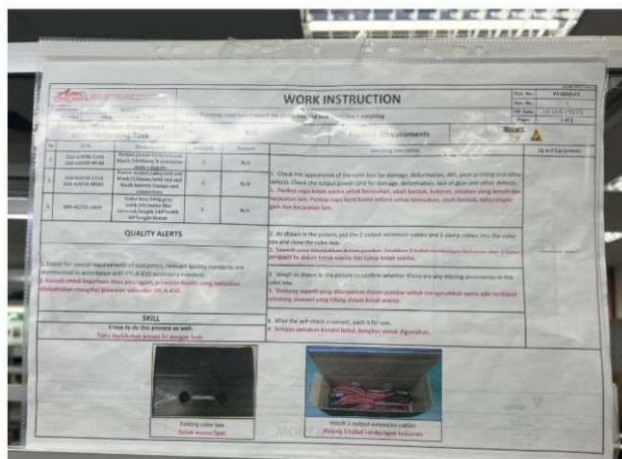


Figure 2: Work Instruction for each station

One day, I was assigned by a production engineer to work as an operator for a collaborative project between AMC Cincaria Sdn. Bhd. and Makita. This opportunity allowed me to be directly involved in a real industrial project where I was responsible for assisting with production tasks and ensuring that the assigned work was carried out according to the required procedures. Through this experience, I gained valuable exposure to how collaboration between companies is managed in a professional working environment as well as the importance of allowing instructions accurately and maintaining productivity on the production line. The working environment was highly strict, and I had the opportunity to witness a situation where the customer rejected products that had already been produced highlighting the importance of quality control in the production process.

One of the most valuable experiences throughout my internship was observing how engineers and technicians handled real industrial problems. In classroom, we often solve circuit problems using formulas and simulations. But in industry, every problem needs to be solved through careful observation, critical thinking and practical decision making. This experience taught me the importance of theoretical knowledge in solving practical problems.

Apart from the technical experience, through this industrial training I learned about responsibility and managing time effectively. I must complete all tasks within the stipulated time and maintain professionalism. This experience has increased my confidence in facing future career challenges.

I also gained valuable new experience working with foreign workers who had limited proficiency in Bahasa Melayu which required me to adapt my communication style and improve my ability to convey instructions clearly in the workplace. For example, most of the

operators here were Burmese and just a few Malaysian people and Indonesian. This experience improved my communication skills with non-Malaysian workers and will be valuable in the future particularly if I pursue career opportunities in a foreign country where I may need to work with people from diverse backgrounds.

Even though the internship was tiring, it gave me a clearer understanding of the reality of working life where continuous effort and hard work are necessary to earn an income and sustain one's livelihood. I observed this situation among foreign workers who often worked overtime to earn additional income to support their families in their home countries.

Authors' Biography



Muhammad Amzar bin Mahadzar is a dedicated student pursuing a Diploma in Electrical Engineering (Electronics) at Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang. Amzar is currently undergoing industrial training at AMC Cincaria from 2 March to 21 June 2026 to complete his Diploma in Electrical Engineering at UiTM. Theoretical knowledge can be applied in a real-world environment through experience in this industrial training, which can further develop his expertise in electrical and electronic engineering. Amzar aims to study to become an engineer who can successfully handle large projects with multinational companies (MNCs).



Shahilah binti Nordin has 23 years of experience in electrical engineering field since she joined Universiti Teknologi MARA, Pulau Pinang in 2003. She received Bachelor of Engineering (Hons) (Electrical, Electronics and Systems) from Universiti Kebangsaan Malaysia, UKM in 1998 and was appointed as lecturer in Uniti College for 5 years. In 2000, she received Master of Engineering (Communication and System) from Universiti Kebangsaan Malaysia, UKM.

eISSN 3093-7027



PUBLISHED BY:
DIPLOMA IN ELECTRICAL ENGINEERING
ELECTRICAL ENGINEERING STUDIES
UNIVERSITI TEKNOLOGI MARA (UiTM)
PULAU PINANG BRANCH
PERMATANG PAUH CAMPUS
13500 PERMATANG PAUH
PULAU PINANG