

Machine Electricity Monitoring and Visualization Implementation in Factory

Entity Overview

	Company name	Location
Representative (Training Provider)	EEC Automation Park, Burapha University	Chonburi, Thailand
	Business overview	
	EEC Automation Park is a human development and technology transfer center for Industry Automation to be industry 4.0	
Partner Organization	Mitsubishi Electric Factory Automation (Thailand) Co., Ltd.	

Training Overview

Training venue	EEC Automation Park, Burapha University, etc.
Project period	25 July 2024 - 31 January 2025 (5 batches)
Training period	13 days (91 hours) in total
Participation fee	54,604 THB/ person
language	Thai
Training features	Feature 1: Training in class on how to visualize and record machine electricity consumption using power meters, PLCs, HMI, MS SQL, and SCADA.
	Feature 2: On-the-job training or Factory site visit) includes:
	<input type="checkbox"/> Implementing machine electricity measurement and visualization.
	<input type="checkbox"/> Defining machine energy loss using Lean and Kaizen
Target trainees	<input type="checkbox"/> Providing improvement scenarios and concepts and specifications for management consideration.
	✓ Engineers and Technicians in the manufacturing industry
	✓ Maintenance supporting machine or utility energy management
	✓ IT Engineers responsible for interfacing with machine data
	✓ Managers focused on creating machine monitoring improvements

Contents of Training

Day 1	Project introduction and basic PLC	+	Day 4 (OJT1)	Pain point analysis: finding machine and line to measure
Day 2	Basic PLC and digital IO		Day 7 (OJT2)	Energy measure solution with HMI mobile and Kaizen
Day 3	Data record part 1: PLC module and analog IO	+	Day 11 (OJT3)	SCADA measuring analysis and adjust
Day 5	HMI and inverter with motor		Day 13	Visualization solution report and presentation
Day 6	Data record part 2: MS SQL and MES	+		
Day 8	Basic SCADA			
Day 9	SCADA tag IO and data record	+		
Day 10	SCADA energy measure and carbon equivalent			
Day 12	Summary OJT and project case			
13 days (2 or 3 days a week) 9.00 AM – 17.00 PM				

Expected Training Benefits

- Expected Outcome for Trainees
 - Proficiency in Automated Data Collection
 - Develop ability to create real-time data visualization
 - Understand how to create energy-efficiency operation planning
 - Identify and analyze the causes of energy waste
 - Has skills to estimate initial carbon emissions based on the amount of electricity consume
- Expected Outcomes for Participating Companies
 - Expected to achieve a 10% reduction in energy consumption for the targeted machines.
 - Capable of creating a roadmap to assess the current Kaizen level and identify the necessary investments for future improvements

How to Apply for Training

Apply at <https://automationpark.or.th/en/news-and-activity/28/>
 More information please contact email automationpark@eng.buu.ac.th