Real-Time Machine Electricity Monitoring and Analysis with SCADA

Entity Overview

	Company name	Location
Representative (Training provider)	EEC Automation Park, Burapha University	Chonburi, Thailand
	Business overview	
	A center for talent development and technology transfer in industrial automation, driving Industry 4.0 with a focus on sustainability.	
Partner organization	Mitsubishi Electric Factory Automation (Thailand) Co., Ltd.	

Training Overview

Training site	EEC Automation Park, Burapha University
Project period	29th April 2025 – 31st January 2026
Training period	9 days (54 hours) in total
Participation fee	39,970 THB/person (1/2 will be subsidized)
Language	Thai
Training features	1. Hands-on experience with PLC, HMI, ME96 Power Meter, and SCADA systems 2. Focus on monitoring and reducing energy consumption for better productivity 3. Practical learning through on-the-job training at factory sites 4. Smaller class sizes with 5 trainees per plant for better engagement 5. Emphasis on reducing greenhouse gas emissions and improving energy efficiency
Target trainees	1. Employees engaged in the manufacturing industry 2. On-site workers on production lines 3. Employees in production control or kaizen teams 4. Middle management in the manufacturing industry

Contents of Training

Module 1: System Preparation for Measure Electricity	Day 1: Smart Manufacturing Kaizen Level (SMKL) & Basic PLC and Human Machine Interface (HMI) - Understanding and Application
	Day 2: HMI and Power Meter - Understanding and Application
Module 2: Industrial Database Application	Day 3: SQL Database and System Interface Hardware, Data Transfer and Record
	Day 4: (OJT1 at Factory, 1 Factory/day) Factory Walkthrough & Power Meter/CT Hardware and Software Setup
Module 3: SCADA and Remote Display	Day 5: SCADA - Practice basic monitoring and control
	Day 6: Energy Measure Display and Group Meeting for Factory Energy Measure
Module 4: Monitor and Analyze Data from SQL	Day 7: System Architecture Setup, Create SCADA Display, Send Data SQL Database
	Day 8: (OJT2 at Factory, 1 Factory/day) Create SCADA Dsplay for Visualization and Commisioning Platform
	Day 9: Project Summary and Presentation for Electricity Visualization, Minimize Energy Loss and Downtime Reduction

Expected Training Benefits

1. **Energy Reduction**
   - ☑ Trainees are expected to reduce energy consumption by 10% for targeted machines, based on the project implemented during the training. Actual savings depend on the selected machines.
2. **SMKL (Smart Manufacturing Kaizen Level) Development**
   - ☑ By developing machine visualizations to Level 1C (Data Analyzing), trainees will analyze data, reduce waste-time, and improve production processes, advancing to Level 1D (Optimizing).
3. **Production Line Development**
   - ☑ Trainees will learn to apply the SMKL concept to improve production lines, progressing to Levels 2C (Analyzing) and 3C (Analyzing) with SCADA software for factory-wide data analysis and optimization.

How to Apply for Training

Apply at https://bit.ly/3YA4p0V
More information please contact email automationpark@eng.buu.ac.th