

## Low-cost OEE Visualization for Productivity Improvement

### 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. , Silpakorn University	

### Training Overview

Training site	EEC Automation Park, Burapha University
Project period	29 <sup>th</sup> April 2025 – 31 <sup>st</sup> January 2026
Training period	8 days (48 hours) in total
Participation fee	39,185 THB/person (1/2 will be subsidized)
Language	Thai
Training features	<ol style="list-style-type: none"> <li>Hands-on and OJT with Arduino, Raspberry Pi, and Node-RED</li> <li>Real factory case studies and project presentations</li> <li>Scalable, low-cost solutions with basic coding understanding</li> <li>OEE visualization for identifying losses and improving productivity</li> <li>Focus on energy efficiency and sustainable manufacturing practices</li> </ol>
Target trainees	<ol style="list-style-type: none"> <li>Engineers, production managers, and factory personnel involved in process improvement</li> <li>Companies in the manufacturing sector aiming to enhance OEE and digitalize operations</li> <li>Factories seeking low-cost solutions and self-development in industrial automation</li> </ol>

### Contents of Training

Module 1: Understanding OEE and Basic Arduino	Day 1: Smart Manufacturing Kaizen Level (SMKL) & OEE Tracking Concept and Improvement
	Day 2: Arduino Programming Development and Industrial Sensors
Module 2: Raspberry Pi for Industrial Automation	Day 3: Raspberry Pi, Node-Red and MySQL database
	Day 4: (OJT1 at Factory, 1 Factory/day) System Installation and Testing Data
Module 3: OEE Calculation and Data Visualization	Day 5: Get Data From Database MySQL and Calculate OEE
	Day 6: Dashboard Design and Realtime Visualization
Module 4: Low-Cost OEE factory application	Day 7: (OJT2 at Factory, 1 Factory/day) Real Case Workshop for OEE Visualization
	Day 8: Project Summary and Presentation for Productivity Improvement, Energy Waste and Carbon Emission Reductions

### Expected Training Benefits

- Enhanced Operational Efficiency**
  - Real-time machine monitoring reduces downtime, increasing production efficiency.
- Energy and Cost Savings**
  - Eliminating energy waste cuts energy consumption and lowers costs, reducing the carbon footprint.
- Improved Data-Driven Decision-Making**
  - Tools like Arduino, Raspberry Pi, Node-RED, and MySQL enable precise data collection for informed decisions.
- Scalable Digital Transformation**
  - Hands-on training helps develop low-cost SCADA platforms that scale with future needs.
- Empowered Workforce**
  - Trainees gain practical skills, driving innovation and continuous improvement.

### How to Apply for Training

Apply at <https://bit.ly/3YA4p0V>  
 More information please contact email [automationpark@eng.buu.ac.th](mailto:automationpark@eng.buu.ac.th)

