



DATA GENERATION

Overview:

Smart Factory takes current manufacturing processes to Industry 4.0 standards; highly agile, efficient and automated production lines capable of data generation and collation. Combined with analytics and machine learning, the factory of the future will have predictive and prescriptive capabilities, contributing to higher productivity & boundless innovation.

The Malaysian Smart Factory (MSF) 4.0 program @ SHRDC offers smart factory competency training through hands-on and online/remote learning approaches, ideal for relevant skillset and talent development towards an Industry 4.0 ready workforce in Malaysia.

The Data Generation program provides a hands-on approach and demonstration towards data generation from manufacturing processes, towards mobile and web-based notification.

Target audience:

Engineers, Technicians, Technical Managers, Production Managers, Academia with relevant background.

Learning outcomes:

- Connect sensors and IoT Gateway
- Use Node Red to read and visualize data
- Implement MQTT for mobile and web-based notification

Course outline:

- Introduction to Smart Factory Operational Technology (OT)
- Connecting sensor(s) and IoT Gateway to PLC controlled tower light
- IoT Gateway and Node-Red Setup - installation & familiarization
- Using Node-Red to read data from sensor module and setup data visualization on web browser
- Implementing MQTT with Node-Red to send data to mobile App or Web Browser to create notification alert
- Hands-on practical assessment (tear down and do-over)

Duration:

6 Days

Cost per program:

RM5,300 per participant (HRDF SBL Claimable)

HRDF INDCERT GRANT* AVAILABLE FOR

- Contributors: 50% of total course fee/participant
- SMEs contributors: 100% total course fee/participant
- Max 5 participants per company

*<https://www.hrdf.com.my/industry-certification-incert/>

Cost fee is inclusive of 6% SST