

# INDUSTRIAL INTERNET OF THINGS

14 ~ 18 March 2022

**Application Deadline 4 March 2022** 



### **ABOUT MTCP**

The Malaysian Technical Cooperation Programme (MTCP) was officially launched on 7 September 1980 at the Commonwealth Heads of State Meeting in New Delhi, India, to signify Malaysia's commitment to the South-South Cooperation, in particular, the Technical Cooperation among Developing Countries (TCDC).

The MTCP emphasizes on the development of human resources through the provision of training in various areas which are essential for a country's development such as agriculture, economy, finance, public management and administration, science & technology and ICT, health diplomacy, safety and security including cyber security, cultural diplomacy, social development, environment-related to SDG2030, education, industrial and technical training. Annually, Malaysia offered more than 60 technical and capacity-building programs under the MTCP, which have benefited more than 35,500 participants from 144 countries.

#### **OBJECTIVES OF MTCP**

- To share development experience with other countries;
- To strengthen bilateral relations between Malaysia and other developing countries;
- To promote South-South Cooperation (SSC); and
- To promote technical cooperation among developing countries (TCDC)

#### **ABOUT JMTI**

The Japan Malaysia Technical Institute (JMTI) situated in the state of Penang, Malaysia is given the responsibility to provide a post-secondary training and tertiary technology education to supplement the shortage of workforce, and to be the ladder for existing skill workforce to upgrade and further their vocational training and education to the highest standards and achievements towards meeting the skilled manpower requirements in high technology industries.

JMTI offers advanced courses in Engineering Technology comprises of five (5) main fields of study which are Computer, Electronics, Mechatronics, Manufacturing and Precision Machining. The main objective of JMTI is to produce well-trained industrial technologist with engineering knowledge and high technical skill especially in the field of engineering which prepares the trainees to adapt and face the challenges of rapid growing technology in line with the advancement and changes of globalization.

### **COURSE OVERVIEW**

The main objectives of this course is to broaden knowledge and practical know-how for technical instructors especially to help them upgrade their knowledge and skills in Industry 4.0 standards. This course will be equipped with special training kit that suit the industrial internet of things (IIoT) technology. Participants will have comprehensive hands-on experience in PLC programming, configuration, communication protocol and command enabling communication with IIoT Gateway. At the end of this course participants can visualize data from manufacturing process to smartphone and web.

#### **COURSE OBJECTIVES**

At the end of the course, the participants are expected to:

- 1. Be able to program and configure PLC for IIoT applications.
- 2. Be able to integrate and establish machine to machine communication.
- 3. Be able to extract data and visualize data in various human-readable forms based on IIoT concept.

Be able to visualize data from manufacturing process to smartphone and web.

## **COURSE MODULE**

#### opics :

- Introduction to Industry 4.0
- Introduction to PLC
- PLC programming
- PLC simulation
- PLC programming
- Simulation and remote access
- Introduction to IIOT Gateway
- Introduction to Note-Red
- Basic Node and Dashboard Node
- IIOT Gateway using Note-Red
- IOT Communication Protocol
- Mobile Apps
- Cloud and Data Visualization

#### **TARGETED PARTICIPANTS:**

This training program is offered to participants who possess practical experience of more than one (1) year related to electronics/ and/or mechatronic fields.

# **ENTRY REQUIREMENTS:**

To be eligible to apply, applicants of the course are obliged to fulfil the following requirements:

- Preference will be given to applicants with practical experience of more than one (1) year in related electronics and or mechatronics fields;
- Nominated by the Government of the respective countries:
- Must be citizens from among all recipient countries of MTCP:
- Should be at the age of under 45 at the commencement of the course;
- Had not participated in any course under MTCP;
- Should possess a fairly good command of the English Language (both spoken and written abilities);
- Must have access to high spec computer (preferably with multiple screen) and reliable internet connection.

#### **APPLICATION PROCEDURES:**

- The course fees are fully sponsored by the Government of Malaysia.
- Applications should be made using the prescribed MTCP forms available at http://mtcpcoms.kln.gov.my/mtcpcoms/upload/MTCP\_2022\_ApplicationForm.pdf
- MTCP application forms can also be obtained from the nearest Malaysian Embassy/High Commission in recipient countries.
- All application forms must be duly completed and endorsed by the Ministry of Foreign Affairs or National Focal/Aid Coordinator Agency in the respective countries and submitted ONLY through the diplomatic channel via the Embassy/High Commission of Malaysia.
- Only successful applicants will receive the Official Invitation notification one (1) week from the course date, by the Training Institute via email.

#### **NOTIFICATION:**

- Applicants who do not receive notification prior to the commencement of the course can assume their applications have been deemed unsuccessful.
- No written notification will be sent to unsuccessful applicants.
- INCOMPLETE/OR UNENEDORSED FORMS WILL NOT BE PROCESSED.

#### **RULES AND REGULATION**

- Participants shall conduct themselves at all times in a manner compatible with their responsibilities as MTCP participants and abide by the laws, rules and regulations as may be stipulated by the host government in respect of this training course;
- During online classes, participants are required to dress appropriately in office attire;
- For formal occasions lounge suit or national costume are welcomed.

## PROGRAM MANAGER:

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