COURSE OVERVIEW:

The purpose of the course is to provide the participants from countries of all MTCP recipient with an opportunity to acquire knowledge, techniques and upskilling in three (3) main area namely i) Printed Circuit Board (PCB) Design & Fabrication; ii) Assembling Project Circuit & Troubleshooting; as well as iii) Introduction to Embedded System & Microcontroller Interfacing. Participants will be taught both the theoretical and practical skills on programming language and interfacing of microcontroller including fault finding, repair and rework operations.

COURSE OBJECTIVES:

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

1. Acquired adequate knowledge to design, build and troubleshoots the embedded system; and

2. Apply the embedded system knowledge and skill in any practical applications desired.

COURSE MODULE

TOPICS:
ELECTRONICS & EMBEDDED TECHNOLOGY WITHIN IR 4.0

- PCB Design and Fabrication
- Copper Bottom Layer
- Silkscreen Top Layer
- Soldermask Layer
- Laminate PCB Board
- UV Exposure
- Develop PCB Track
- Etching PCB
- Photoresist Stripper
- Soldermask
- Drilling PCB
- Principles of troubleshooting
- Inside of electronic equipment
- Tools and electronic test equipment
- Soldering and desoldering equipment and technique
- Electronic components & their testing
- Getting Started with Internet of Things (IoT)
- Sketching in Code
- Working with Variables
- Practical applications

BENCHMARKING AND EDUCATIONAL VISITS

- Benchmarking Visits to training centres;
- Educational visit to national and heritage sites.

BACKGROUND OF THE MALAYSIAN TECHNICAL COOPERATION PROGRAM (MTCP)

The Malaysian Technical Cooperation Programme (MTCP) was first initiated at the First Commonwealth Heads of Government Regional Meeting (CHOGRM) for Asia Pacific Region in Sydney in February 1978. It was officially launched on 7 September 1980 at the 2nd CHOGRM in New Delhi, India, to signify Malaysia's commitment to South-South Cooperation, in particular Technical Cooperation among Developing Countries (TCDC). In line with the spirit of South-South Cooperation, Malaysia through the MTCP shares its development experiences and expertise with other developing countries. Since its inception in 1980, more than 34,000 participants from 144 recipient countries have benefited from the various programmes offered under the MTCP. More information at MTCP website: https://mtcpcoms.kln.gov.my/mtcpcoms/online/list_course

OBJECTIVES OF MTCP:

- To share Malaysia's 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).

TRAINING INSTITUTE:
JAPAN MALAYSIA TECHNICAL INSTITUTE (JMTI)

The Japan Malaysia Technical Institute (JMTI) situated in the state of Penang, Malaysia provides a post-secondary training and tertiary technical and vocational (TVET). Focusing on pre-service and in-service training based on 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.

Moving forward, JMTI is targeting to become the world premier TVET institution by providing more international program and therefore to contributes to global skilled workforce.

MALAYSIAN TECHNICAL COOPERATION PROGRAMME (MTCP) 2020

ELECTRONICS & EMBEDDED TECHNOLOGY WITHIN IR 4.0

15 APRIL 2020 to 23 APRIL 2020

APPLICATION DEADLINE: 28 FEBRUARY 2020

JMTi
Japan Malaysia Technical Institute
Pulau Pinang

TARGETED PARTICIPANTS:

This training program is offered to participants who possess the **theoretical and practical experience of more than one (1) year related to electronics fields**, from **all recipient countries of MTCP**. Participant is a government servant and nominated by the Government of the respective countries.

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 the **theoretical and practical experience of more than one (1) year in related electronics fields**;
- Nominated by the Government of the respective countries;
- Must be citizens from among the **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);
- Medically fit (applicants must submit his/her medical report together with the application form)

APPLICATION PROCEDURES:

- Applications should be made using the prescribed MTCP forms available at https://mtcpcoms.kln.gov.my/mtcpcoms/online/list_course.

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 (the relevant ministry or agency responsible for the overall coordination of international technical assistance) and should be submitted **ONLY** through the diplomatic channel via Embassy of Malaysia in the respective countries. Submitted application forms must be accompanied by the applicant's:

- Copy of passport (All pages of passport)
- Passport sized coloured photo (3.5cm x 5cm)
- Medical Report

Successful and unsuccessful applicants will be notified by JMTI

NOTIFICATION:

- Applicants will be notified by JMTI
- Successfully selected participants will be given a letter of offer by the Training Institution.
- Participants must respond to either accept or reject the offer within **five (5) working days** for confirmation.
- Written notification will be sent to unsuccessful applicants by the Training Institution by **Email** at least **four (4) weeks prior to the date of implementation of the MTCP course or within a reasonable period** to prevent the applicant from attending the MTCP course without invitation.
- **INCOMPLETE/OR UNENEDORSED FORMS WILL NOT BE PROCESSED.**

VISA & VACCINATION:

It is **MANDATORY** for all MTCP participants to follow the Visa with Reference (VWR) application procedure. Once the approval is obtained, the training institution will send a copy of VDR approval letter to the participants. Subsequently, with the copy of the approval, the participants may get the VDR from the nearest Embassy of Malaysia. Regarding Visa Requirement by Country from Department of Immigration Malaysia, please refer to the following link:

https://www.imi.gov.my/index.php/en/main-services/visa/visa-requirement-by-country.html

NOTE:

- Participants from Yellow Fever endemic areas including diplomatic and official passport holders are required to take a mandatory vaccination for yellow fever at least ten (10) days prior to their departure to Malaysia and required to produce a Yellow Fever Vaccination Certificate at the entry point in Malaysia.
- For course information and application guidelines, please refer to the following link:
  http://mtcpcoms.kln.gov.my/mtcpcoms/online/list_course

- 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 lectures, male participants are required to dress in long-sleeved shirts with ties and long pants.
- Female participants should be appropriately dressed in office attire.
- For formal occasions – lounge suit

OTHER INFORMATION:

COURSE TUITION AND FEES:

Tuition fees will be borne by the Malaysian Government under the MTCP.
Participants will be provided with a daily allowance of RM85.00 that is sufficient to cover daily meals and laundry

AIR FARES:

The Government of Malaysia shall provide excursion economy air ticket to all MTCP participants from the capital city of the MTCP recipient country to Kuala Lumpur and return air ticket from Kuala Lumpur to the capital city of the MTCP recipient country.

ACCOMMODATION:

Lodging will be provided throughout the duration of the training.

MEDICAL AND DENTAL TREATMENT:

Medical treatments are provided at government hospitals/clinics only and the expenses will be borne by the Government of Malaysia under the MTCP. In case of an emergency, participants are eligible to be admitted to government hospitals/clinics. Dental treatments are restricted to extraction and filling only.

PROGRAM MANAGER:

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