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# IMPLEMENTATION

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## MALAYSIAN TECHNICAL COOPERATION PROGRAMME MTCP 2019



Funded by:



Organized :

Course :

1. Industrial Electrical Wiring and AC Motor Control Technology.
2. Application and Development of PLC System
3. Industrial Automation in TVET Training (Intermediate)
4. Enhancement Train The Trainer Programme Towards IR4.0



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**3 SEPTEMBER 2019 – 20 SEPTEMBER 2019  
( 18 DAYS)**

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*These courses offered series of lectures, practical / hands on training, discussions and field visits to the Training Institution and Industry in Malaysia.*

**LIST OF PARTICIPANTS**  
**Malaysian Technical Cooperation Programme (MTCP) 2019**  
**Industrial Electrical Wiring and AC Motor Control Technology**  
**Course Duration: 3 September 2019 – 20 September 2019**



MR. TSHERING DORJI

BHUTAN



MS. IRYNA YAREMAK

UKRAINE



MR. K.G.P.A. KARIYAWASAM

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LAO PDR



MR. ONYEBUCHI ONYEKACHI  
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MR. MD ATOWAR RAHMAN  
MOLLAH

BANGLADESH



MR. ALI HANI MOHAMMAD AL  
ROUSAN

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MR. CHIMWEMWE JACKSON  
CHIMONO











MALAWI



MR. ENKURT TROCI

ALBANIA

**LIST OF PARTICIPANTS**  
**Malaysian Technical Cooperation Programme (MTCP) 2019**  
**Application and Development of PLC System**  
**Course Duration: 3 September 2019 – 20 September 2019**

 <p>MR. AMR IBRAHIM MOHAMED</p> <p>EGYPT</p>	 <p>MR. ADAMS SOLOMON ABU</p> <p>NIGERIA</p>	 <p>MR. JOSE ROBERTO CUARAN VALENZUELA</p> <p>COLOMBIA</p>
 <p>MR. ISACK KWIGEMA</p> <p>RWANDA</p>	 <p>MR. BASILIO FREITAS</p> <p>TIMOR LESTE</p>	 <p>MR. SHEIKH JAH</p> <p>GAMBIA</p>
 <p>MR. BRAHIM ABDUL-RAHAMAN</p> <p>GHANA</p>	 <p>MR. UWASEKURU GISA JEAN DE DIEU</p> <p>TANZANIA</p>	 <p>MS. BERRAHMA FADILLA</p> <p>ALGERIA</p>
 <p>MR. PELE SENGPHANGNA</p> <p>LAO PDR</p>		

## LIST OF PARTICIPANTS

**Malaysian Technical Cooperation Programme (MTCP) 2019**

**Industrial Automation in TVET Training (Intermediate)**

**Course Duration: 3 September 2019 – 20 September 2019**



MR. ZAIETER FARES

ALGERIA



MR. ANDRES AGUIRRE GARCIA

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MR. MAXWELL ENTSIE

GHANA



DR.. GARIMA SAINI

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MR. GOMEZGANI NYIRENDA

MALAWI



MR. TEELUCKMUN BHAUGERUTTY

MAURITIUS



MR. YAHAYA PIOUS

NIGERIA



PROF. GAURANG SHARMA

INDIA

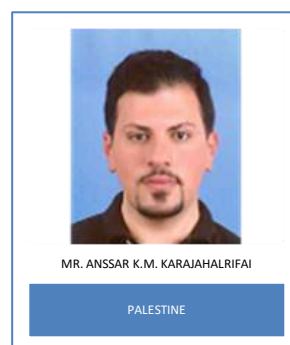
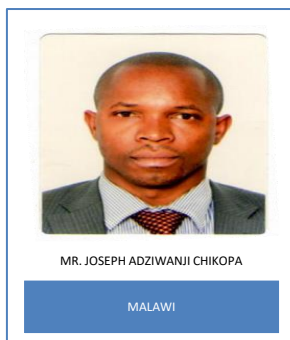
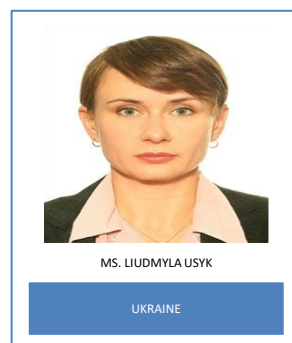
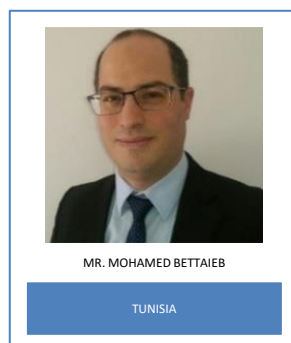
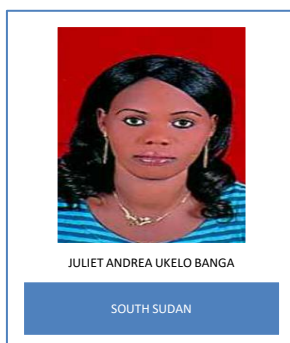
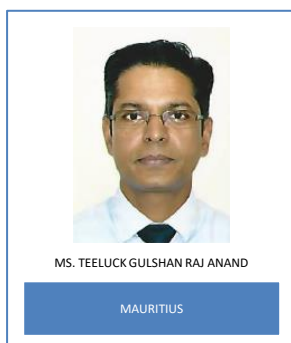
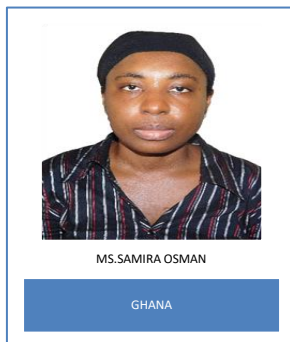
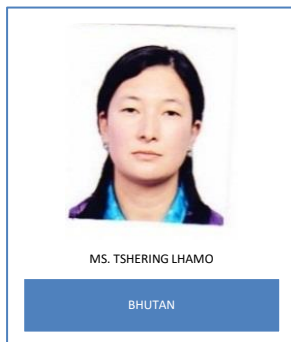


MR. HOUSSEM MEJRI

TUNISIA



**LIST OF PARTICIPANTS**  
**Malaysian Technical Cooperation Programme (MTCP) 2019**  
**Enhancement Train The Trainer Programme Towards IR4.0**  
**Course Duration: 3 September 2019 – 20 September 2019**



## 1.0 TRAINING OUTLINE

### 1.1 Opening Ceremony



*Introduction Session During the Opening Ceremony*

The opening ceremony was held at the Grand BlueWave Hotel, Shah Alam, on 3 September 2019 and was successfully officiated by the Dr. Mohd Rashid Bin Buyong Hamzah, Deputy Director General of Department of Skills Development. The ceremony was also attended by MFA Official, Senior Officers and instructors from CIAST.



*Country Report Presentation*

## 1.2 Orientation and Ice Breaking Activities

The purpose of the orientation and ice-breaking activities are for the participants to feel free to interact and help everyone feel comfortable and it is also a part of the programme before the training began. The session held on 4<sup>th</sup> September 2019 at the Grand BlueWave Hotel. Variety activities was conducted and undergone by the participants throughout the ice breaking activities.

The session has gave the positive impact on the participants whereby through the observations, communications among the participants and the facilitators has improved.



Group activity during Ice Breaking Session



### **1.3 Action Plan Report**

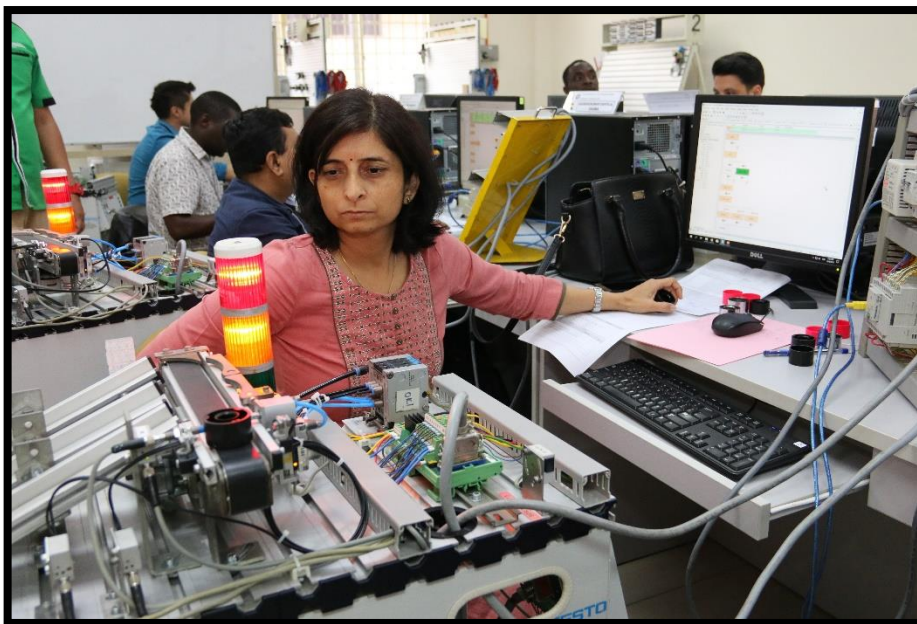
At the end of the program, each participant has prepared an Action Plan to be implemented in their individual training programs in their respective countries. They also presented the action plan for ten minutes and followed by the question and answer session.

## **2.0 METHODOLOGY**

The programme comprised of series of lectures, hands-on practical training which is almost 60% of the training, discussion and field visits. In sharing Malaysia's experience, it is hoped that they will improve their skills and prepared them with the needed for the human capacity and economy development growth which is in line with TVET objectives. The programme was fully conducted in English in order to enable exchange of experiences and ideas sharing.

### **2.1 Industrial Automation in TVET Training (Intermediate)**

The technical training is designed to prepare in a concise and compact manner to facilitate the automation system in TVET training such as PLC, Modular Production System (MPS) and Devices Communication.





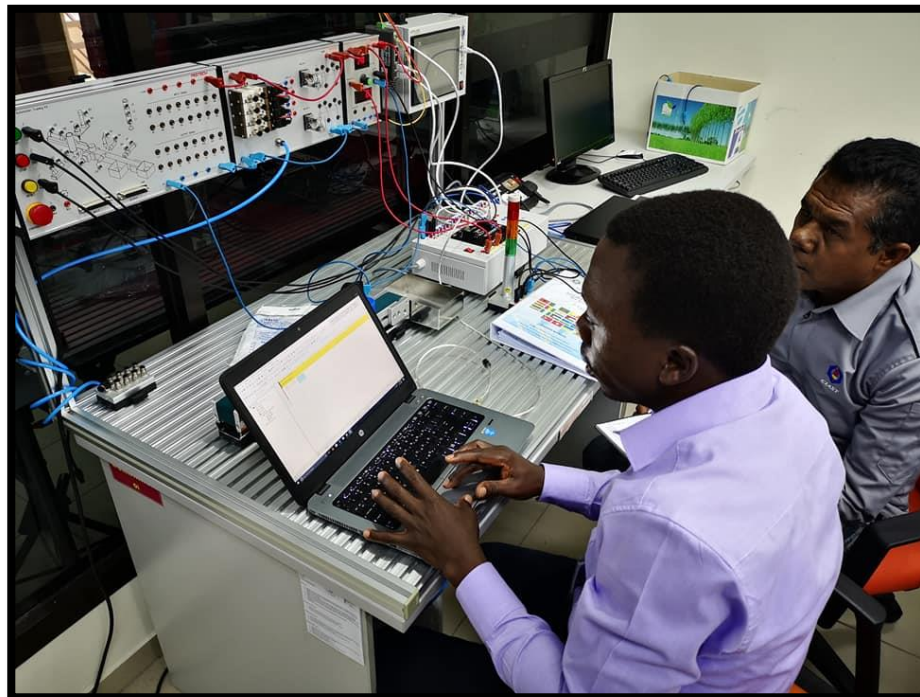
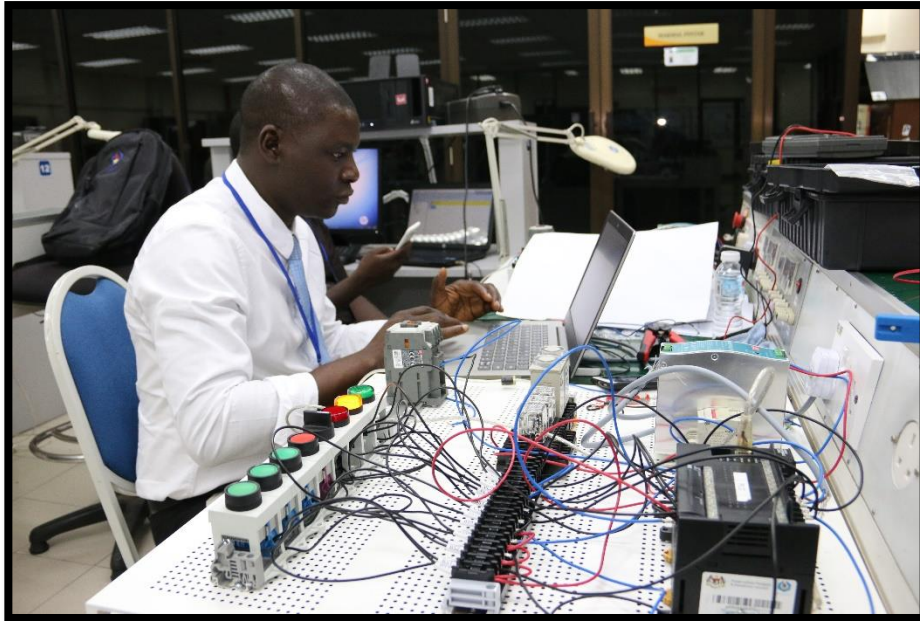


Hands on Practical : Industrial Automation in TVET Training (Intermediate)

## **2.2 Application and Development of PLC System**

Application, Development and troubleshooting of PLC System is a technical course designed to:

1. Enhanced participants with an understanding of the concept of Programmable Logic Controller combine with Human Machine Interface to get required control element to be done.
2. Enabled participants to enhance knowledge and skills in handling PLC control and it applications; and
3. Enabled participants to enhance knowledge and skills in handling HMI (Human Machine Interface).



Hands on Practical : Application and Development of PLC System

### 2.3 Enhancement Train The Trainer Programme Towards IR4.0

This course provides a structured framework with a set of activities to enable individuals is designed with best practices of IR 4.0 implementation. The advantages of the latest technologies through industry-specific use cases and projects.

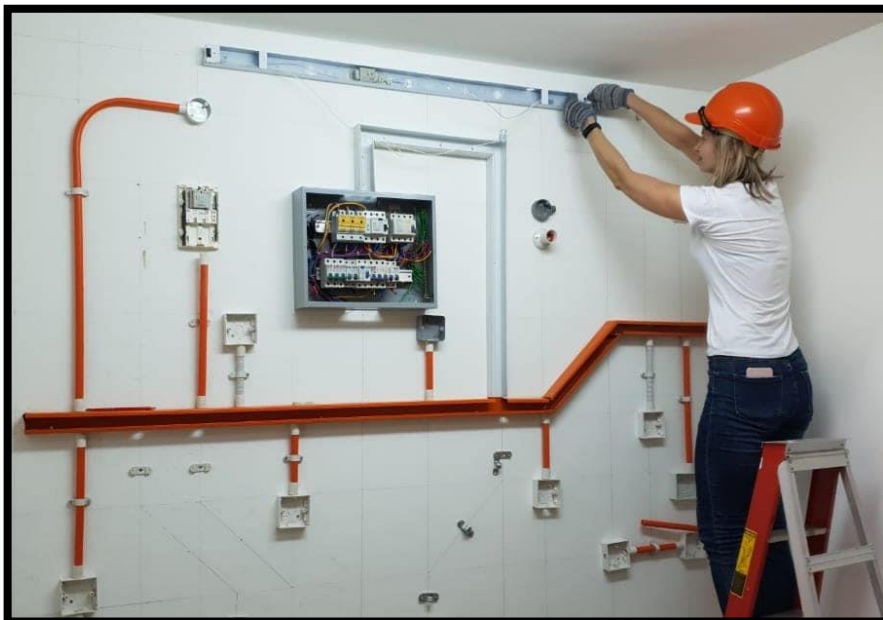
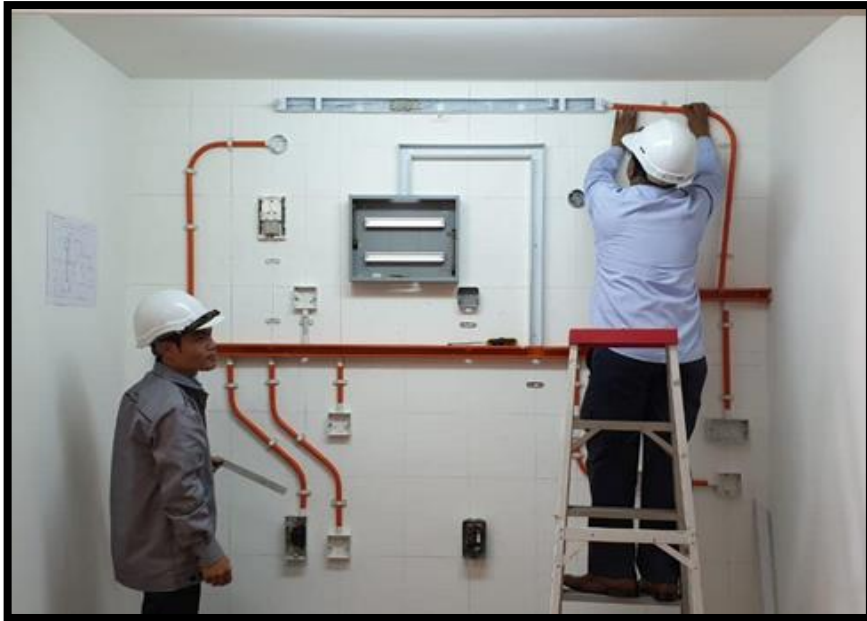




Hands on Practical : Enhancement Train The Trainer Programme Towards IR4.0

## 2.4 Industrial Electrical Wiring and AC Motor Control Technology

The training focus on to train the trainer by Provide participants with an understanding of the concept of three phase Industrial Electrical Wiring in Premise,Buildings and Application Motor Control System. This course provides a structured framework with a set of activities to enable individuals to be certified as a trainer.



Hands on Practical : Industrial Electrical Wiring and AC Motor Control



## 2.5 Study Visit

As a field visits were a part of the programme, the participants visited various organization as well as industries to relate to the programme's objectives. Participants has opportunity to visit the **Higher National Youth Skills Institute (IKTBN) Chembong** and **Industrial Training Institute (ILP) Bukit Katil, Melaka** in order to expose participants with the TVET implementation in Malaysia.



*Group Photo at Higher National Youth Skills Institute (IKTBN) Chembong*



*Electrical Workshop at Industrial Training Institute, Bukit Katil Melaka*



*Field visit to Ministry of Foreign Affairs, Malaysia*



*Putrajaya*



*Mini Malaysia, Malacca*



*Mamee, Malacca*



### 3.0 CLOSING CEREMONY AND CERTIFICATE HAND-OVER



*Certificate Awarded by YBrs Tuan Haji Zaihan Shukri*

The closing ceremony was held on the 19<sup>th</sup> August 2019 at the Rebana Hall, Grand BlueWave Hotel, Shah Alam. The closing was officiated by YBrs. Tuan Haji Zaihan Shukri. The Director General of Department of Skills Development on behalf of YB Dato' Mahfuz Omar, Deputy Minister, Ministry of Human Resources. The ceremony was attended by Dr Mohamad bin Sulaiman, Director of CIIAST, Ms. Siti Farsha Murni Izami, Assistant Secretary ICADD, MFA. Senior Officers, instructors from CIIAST and distinguish guest.



Participants of Industrial Automation in TVET Training (Intermediate)



Participants of Industrial Electrical Wiring and AC Motor Control Technology.





Participants of Application and Development of PLC System



Participants of Enhancement Train The Trainer Programme Towards IR4.0



The ceremony had marked the end of the MTCP training. It also provides an opportunity for participants to bid farewell and appreciation especially to their instructors in CIAST. Certificates were awarded during the ceremony and the participants also made a special performance for the guest.



*Speech by the participant's representative from Palestine*



*Special performance from Participants MTCP 2019 CIAST*

#### **4.0 CONCLUSION :**

In general the training objectives were achieved. As for the outcomes, the participants did manage to acquire full knowledge in both theoretical and especially in the practical aspects of skills. The training curriculum was successfully implemented with full commitment from trainees and trainers. Despite having language barrier, the participants and the CIAST Trainers had tried their best in order to make the course successful.

From the results, most participants have showed the changes and improvement by comparing the marks between pretest and the post-test. They also showed positive and good performance after attending this training. There is no doubt where there is significant percentages differences and it is quite difficult to determine the main cause. On the other hand, the low percentage difference should be due to the participants own prior knowledge before coming to the training which could lead to a smaller differences in the results.

Further expectedly, by the end of the training programme, the participant has enhanced their theoretical knowledge and practical skills in the related field. However there are also a problems and challenges in the implementation process but there still rooms for improvement in the future.

The feedback from the participants through the evaluation form is also a crucial part helpful for CIAST, in order to know what the participants really needs in terms of method of delivery, the content and the audio visual aids prepared by their instructors in helping them to understand better in achieving the objectives of the lesson. Recommendation given by all parties will considered in the next programme and it will help CIAST in giving and providing excellent training that suit the standard of the international course in the future.