



DeepTech & Futureskills Training Programme

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<https://forms.gle/6nGRvBRb44obwma76>
or**



SCAN ME

Training Provider



Industry Partner



AI & Industrial Automation Upskilling Programme

Max classroom size- Unlimited

(Delivery method: Online)

Duration- 2 months

For further information, please contact:
deeptech@mimos.my

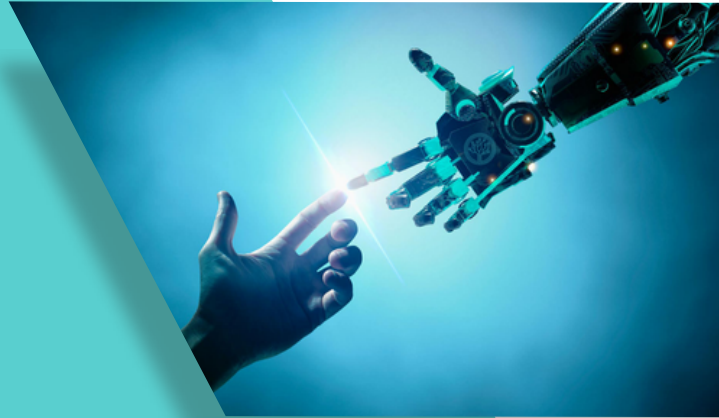


A strategic initiative of the Malaysian Government through The National Employment Council (NEC) and the Ministry of Science, Technology and Innovation (MOSTI) to create employment opportunities for Malaysians post-pandemic COVID-19.

Training Overview

This program is designed to help learners understand the rudiment of Artificial Intelligence, Industrial Automation and ai standard vision software. Industrial automation covers a wide field and segments. As such, the course is to provide the trainees a general over view of various automation examples and scenarios of application they will face in future. It is a partial literature, informative lecture that enrich the candidate with current market trend and expectations of the industries.

The impact of automation from material handling, mass production machinery to customised process to a company/ organisation. At the end of the course, candidate will be able to classify their observation in selecting the kind of automation, mechanical and control system through case study and know where to find further resources for automation projects and have dedicated ai vision software account.



Target Audience

1. Those who want to work in the field of Artificial Intelligence & Industrial Automation
2. Fresh graduate in Computer Science, Engineering field.
3. Unemployed who want to gain knowledge in Artificial Intelligence & Industrial Automation.

3. Contextualization of knowledge
4. Critical thinking to work collaboratively with others
5. Ability to use the software for research and development.



Pre-requisites

1. Basic knowledge in fundamental of programming
2. Understanding of Artificial Intelligence & Industrial Automation is an advantage



Learning Objectives

1. Basic knowledge and understanding of the design, principles and techniques of the software.
2. Ability to apply, navigate and use the software for problem solving





Course Content

1. What is the Internet of Thing (IOT)

- Example of IOT Layers of IOT
- IOT Hardware
- IOT software and application
- MQTT Protocol
- NODE RED for IOT
- Developing IOT dashboard.

2. Industrial Automation

- High Mix low volume vs low mid high volume. Find your focus.
- The impact of industrial automation. Where are we.
- Material handling and managing how it flows.
- Design for productivity. quality and special needs.
- Spot the pain point and process critical characteristic
- Defining and brainstorming open mindedly.
- Fundamental mechanical and various control system

3. Introduction of PLC Control

- Introduction of PLC
- PLC I/O (input /Output) explanation
- Programming Terminals and Peripherals
- Introduction of PLC Software (GX-Developer)
- Basic Logic, Ladder Logic etc
- Basic Programming Introduction
- Simple Programming Examples

4. Introduction of Python and ROS

- Basics of Python
- Introduction to ROS and Linux Part 1
- Introduction to ROS and Linux Part 2
- Robotics Simulation and Real Robot Use-case Study
- ROS 2D Indoor Navigation Introduction
- ROS 3D Outdoor Navigation Introduction

**** Training Course Fee: RM 5,000.00 per person is sponsored by the Government of Malaysia**



Trainers Profile



PROF AZHAR BIN ABDUL AZIZ (Industrial Automation)
Qualification Ph. D. Mechanical Engineering (Internal Combustion Engines), UMIST 1999 Industry/ Company Portland Energy Sdn Bhd)
Technical Director Specialisation Mechanical System Design & Manufacturing, Alternative Fuel and Renewable Energy, Thermal System Design, Power Plant Engineering



MR CALVIN LAI (PLC Control)
Qualification Bachelor Degree in Mechanical Engineering Industry/
Company Private Technical School and Industries Trainer
Specialisation Automation Project and Services



MR STANLEY SEOW (IOTI)
Qualification University of Oklahoma, USA with a degree in Management Information Systems Industry/ Company Adjunct Lecturer at Raffles College Kuala Lumpur since 2017 Specialisation •With more than twenty years of combined experience in the delivery of IoT, hardware design, network, security and Internet appliance business. Focused on hardware and printed circuit board (PCB) design, firmware programming, monitoring dashboard and control / automation system



MR KENNEDY WAI (Python and ROS)
Qualification NCTU(Taiwan), majored in Electrical & Computer Engineering (Robotics and Automation). Industry/ Company CEO+CTO & Founder
Specialisation •Built the entire first MVP/prototype of outdoor autonomous delivery robot from scratch after starting HelloWorld Robotics in China, responsible for mobile base mechanism design, embedded systems, electrical design