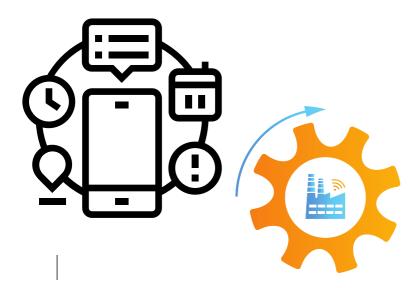
# Industrial Automation Towards Industrial Revolution 4.0







# About us Who we are

The Centre for Continuing and Professional Education (CPE) was established in 1999 to provide continuing professional education and lifelong learning opportunities for University's staff, students, alumni and the public. As part of TAR UMT's commitment to continuing education and lifelong learning, CPE is entrusted with designing, developing and delivering various activities, workshops and programmes to meet the diverse learning needs of multiple parties.

#### **About This Training**

THE FOURTH INDUSTRIAL REVOLUTION, commonly known as Industry 4.0, will change the way businesses function especially in the manufacturing industry and increase their competitiveness globally. This course is intended to close the gaps by providing the hands-on opportunities in the design and development of industrial automation system. In this beginner level course, participants would be introduced to sensor technologies, actuators, PLC architecture and programming that served as the basis of an automation system. Then, they have the opportunity to build their own simple automation system integrating and combining what they learned. By grabbing this valuable experience, participants familiarize themselves on the concept and implementation of automation to build confidence in setting the future automation agenda in industry.



#### Date and Time

16 - 18 & 23 - 25 June 2023 Friday - Sunday 9 AM to 5 PM



#### **Training Venue**

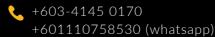
TAR UMT Jalan Genting Kelang, Setapak 53300 Kuala Lumpur

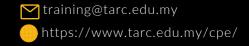


#### **Trainers**

Ts Dr Lee Yoon Ket Dr Chiew Tsung Heng Dr Chang Kai Ming Dr Ong Jia Jan







## **COURSE CONTENTS**







Sensing Technologies and Actuators

Motors and Programmable Logic Controller (PLC)

Hands-On Industrial Automation Project: I

Hands-On Industrial Automation Project: II

PLC Simulation Programming and Its Application

Hands-On Industrial Automation Project: III

#### **Introduce our Trainers**

Lee Yoon Ket

Ts Dr Lee Yoon Ket is the principal lecturer of the Mechanical Engineering Department in the Faculty of Engineering and Technology, TAR UMT. He completed his PhD at Queen University of Belfast, U.K in 2004. In 2017, Ts Dr Lee has been registered under the Engineering Council U.K. as a member of Institute of Mechanical Engineers with the title of Chartered Engineer. He has registered with Malaysia Board of Technologists in the Manufacturing and Industrial Technology area with the title of Ts. in 2018. Ts Dr Lee possesses 7 years of industrial working experiences and 8 years of academic experiences. His research interests mainly focus on application of Industry 4.0 to SMI, Autonomous system and Manufacturing planning and control. Currently, Ts Dr Lee is leading the Centre of Autonomous and Robotics Research in TAR UMT that focuses on applications of Industry 4.0 in industry. Currently his research center is constructing a RAMI Industry 4.0 ginger manufacturing line testbed which is supported by RMK11 grant. Furthermore, Ts. Dr Lee is holding an industrial research grant project to automate the production loading system in the context of Industry 4.0 for a SMI factory.

#### **Contact Us**



#### **Chiew Tsung Heng**

Dr Chiew Tsung Heng is the Programme Leader for Mechatronics Engineering programme and senior lecturer in Department of Mechanical Engineering, Faculty of Engineering and Technology, TAR UMT. His research interest is in the motion control system of machine tools, industrial automation and robotic technologies, and Industry 4.0. Dr Chiew received his PhD, MSC in Manufacturing Engineering, and Bachelor in Manufacturing Engineering (Robotics and Automation) from Universiti Teknikal Malaysia Melaka. Dr Chiew has 3 years of teaching experience and is now actively involved in industrial collaboration research and projects. He is the core member of the Centre of Autonomous and Robotics Research in TAR UMT that is heavily involved in the construction of a RAMI Industry 4.0 ginger manufacturing line testbed. Moreover, he also cosupervised the industrial project of automating a production loading system in the context of Industry 4.0 for a SMI factory.

#### **Chang Kai Ming**

Dr Chang Kai Ming Currently a Senior Lecturer in the Department of Mechanical Engineering, Faculty of Engineering and Technology, TAR UMT. His research interest is in robotics, automation and networking for Industry 4.0. He received his PhD in Electronics and Electrical Engineering, MSc in Bio-nanotechnology and MEng Mechanical Engineering (Mechatronics) from the University of Southampton, UK. Dr Chang has 2 years of teaching experience and is a core member of the Centre of Autonomous and Robotic Research (CASRR) in TAR UC. Additionally, Dr Chang is also a member of the iMechE, IET and IEEE. The current projects which he is involving is automated vehicles and computer vision for remote monitoring and control of manufacturing activities.

#### Ong Jia Jan

Dr Ong Jia Jan Currently a Senior Lecturer in the Department of Mechanical Engineering, Faculty of Engineering and Technology, TAR UMT. He completed his PhD in 2016 and MEng (Honours) Mechatronic Engineering in 2009 at University of Nottingham Malaysia. Since 2017, Dr Ong has been registered under the Institute of Engineering and Technology (IET) U.K. as a Member of IET. Dr Ong possesses 4 years of industrial working experience and 2 years of academic experiences. His research interest area is in Industry 4.0, image data compression, encryption, error correction and minimal instruction set computer.

Click/Scan for enquiry





#### Industrial Automation Towards Industrial Revolution 4.0

Venue: TAR UMT, Jalan Genting Kelang, Setapak, 53300 Kuala Lumpur

Date: 16 - 18 & 23 - 25 June 2023 (9.00 am - 5.00 pm)

## **REGISTRATION FORM**

Fees:

RM 2067.00 per participant (inclusive of 6% Service Tax)

TAR UMT Student/Alumni RM 1653.60 per participant (inclusive of 6% Service Tax



The Manager

TARC Education Foundation (1033820M)

Tunku Abdul Rahman University of Management and Technology (TAR UMT)

TEL: 03-4145 0170 Email: training@tarc.edu.my

#### Dear Madam / Sir,

Please register the following participant(s) for the above programme: (To be completed in BLOCK LETTERS)

1	Name:		IC No. :		Nationality :
	Email:		Mobile No. :		Designation :
2	Name:		IC No.:		Nationality:
	Email:		Mobile No. :	1	Designation :
	(If space is insufficient, please attach a separate list)				
	Disclaimer				
	Avance of the worskshop date will receive full refund. Cancellations made thereafter will be subjected to a cancellation fee of 50% the workshop fee. All fees are payable in the event of non-attendance of any registered participant(s) or the overall attendance alls below 75% of total workshop hours. Replacement(s) can be accepted at no additional cost if notified 24 hours prior to the sommencement of the workshop. The Tunku Abdul Rahman University of Management and Technology reserves the right to lange the speaker, reschedule or cancel the workshop and all efforts will be taken to inform participants of the changes. We will be claiming under HRD Corp Claimable Course and full payment would be made to Tunku Abdul Rahman University of Management and Technology in the event that no disbursement from HRD Corp under any circumstances.  We will NOT BE CLAIMING from HRD Corp. Payment will be made to account payee TAR UMT by cheque or bank transfer to Public Bank Account No. 3181564113. Kindly submit your payment remittance to training@tarc.edu.my together with this registration form.				
Sı	ubmitted by				
	Name :		Designation :		Department:
	Email:		Telephone No.:		Mobile No. :
	Company Name:		Company Registration No.:		
	Company Address :		Company Stamp & Signatur	e:	Date: