

Course Fees

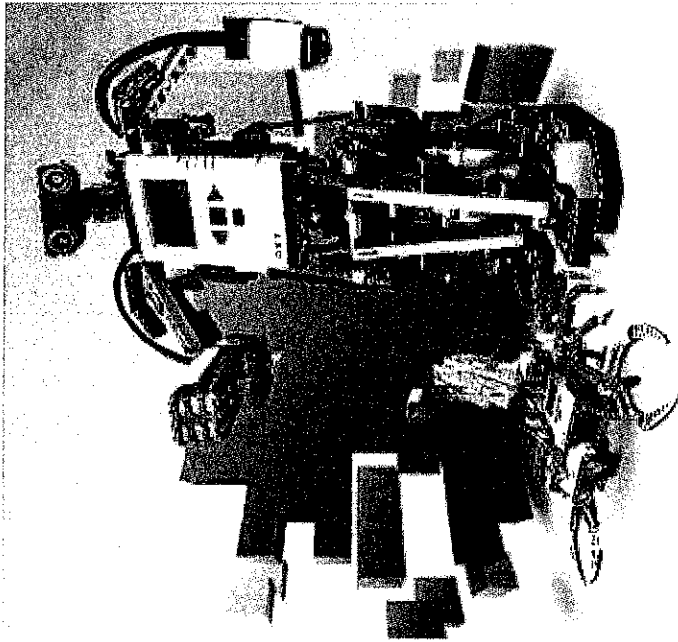
All course fees are borne by the Government of Malaysia

Attire

Participants are to dress in formal or office attire throughout class sessions as well as during official visits to Government Ministries/Agencies.

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 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 or national costume are required.



MMU
MULTIMEDIA UNIVERSITY

TRAINING METHODOLOGY

This is a highly interactive and active training program. Participants will be exposed to the concepts of modelling and control of industrial robot (simulation-based) design and development conception and technology solutions, exchanged ideas, and shared knowledge and experience with fellow participants and facilitators. Participants will also work RPA best practices and do a detailed case study on AI Service Robots and factory automation. Participants are expected to be active and mobile.

Monitoring and Evaluation Method

- Experience sharing and reflections
- People touch and engagement
- Hands-on activities
- Formative assessment throughout the course
- Presentation and feedback

TARGETED PARTICIPANTS

A candidate is eligible for admission only if he/she meets the following requirements:

- Engineers, Educators, Researchers, Designers, R&D Professionals, Product/Innovation/Project Managers who are involved in design and manufacturing sectors, robotics and AI fields and industry 4.0 related divisions.
- Each participant must possess Engineering background.
- Must not be more than 50 years of age.
- This is a technical course and the use of computer is compulsory.
- Each participant is expected to have a digital computer.
- Must ensure that he/she has never participated in any previous MTCP courses organised by Multimedia University or other Malaysian implementing agencies.
- This course will be conducted in English. Therefore, participants are required to have an appropriate level of proficiency in English, written as well as spoken.

- Comply with other general requirements for MTCP.

APPLICATION GUIDELINES

Applications should be made using the prescribed MTCP forms available through https://mtcpcoms.kln.gov.my/mtcpcoms/online/list_course. MTCP application forms can also be obtained from the nearest Malaysian Embassy / High Commission in recipient countries. Submitted application forms must be accompanied by the applicant's

- Copy of Passport (all pages & coloured)
- Passport sized photo (3.5cm x 5cm) (White background)
- Medical Report

All application forms must be duly completed and endorsed by the Ministry of Foreign Affairs of their respective countries should be submitted only through the diplomatic channel via Embassy/High Commission of Malaysia in the respective countries.

Successful candidates will be duly notified by MMU, one (1) month before the commencement of the course.

Incomplete and/or unendorsed forms will not be processed.

GENERAL CONDITION OF PARTICIPATION

Participants will receive support from the Governments of Malaysia including:

Air-Fare

A return flight ticket from the capital city of the recipient country to Kuala Lumpur on economy class is provided for participants.

VISA AND VACCINATION

All participants must enter Malaysia with Visa With Reference (VWR). Participants selected for the programme will receive a copy of the letter of approval from MMU. With the copy of the approval letter, the participant must obtain the VWR stamping from the nearest Malaysian mission. Wherever applicable, participants are advised to arrange on their own, any necessary vaccination prior to travel to Malaysia. Participants from certain countries are required to take a mandatory vaccination for Yellow Fever at least 10 days prior to their departure to Malaysia. Yellow Fever certificate is required to be produced upon landing in Malaysia. Please refer to the MTCP website for further details.

<https://mtcpcoms.kln.gov.my/mtcpcoms/online/applicationGuide>

Accommodation

Participants will be accommodated at nearby hotel (or at the hostel within the vicinity of the training institute). Participants are strictly not allowed to bring any family members during the course.

Daily Allowance

Participants will be provided with a daily allowance of RM85.00 that is sufficient to cover daily expenses.

Meals

Meals will be provided throughout the duration of the course.

Dress Code

During lectures, male participants are required to dress in long-sleeved shirts with ties, long pants and lounge suits and female participants should be appropriately dressed in office attire. For formal occasions-lounge suit or national costume are required.

ABOUT MULTIMEDIA UNIVERSITY

In 1996, the Malaysian Government was looking for methods to liberalise higher education in the nation, and to involve the private education sector in the development of this critical sector of human capital building. On October 1996, Telekom Malaysia (TM) was given the distinction by the Ministry of Education to set up the first private University in Malaysia. TM accepted the invitation and Universiti Telekom was established in Melaka. A year later, with the planning of the MSC underway, the government was once again looking for a suitable candidate to construct a university in the heart of the MSC. In March 1997, TM was again honoured when it was given the task to set up this university, to be known as Multimedia University.

Considering that the telecommunications industry was becoming closely linked with developments in ICT, expansion into an education field directly related to ICT is a natural strategic decision. MMU aspires to become a top 100 University in Asia with Global Recognition through Quality Student and Staff Engaged in Innovative Academic Programmes and Research driven by Academic and Commercial Revenue streams.

ABOUT FACULTY OF APPLIED COMMUNICATION (FAC)

The acronym of "FAC" uniquely represents the strength of communication being a salient academic attraction, aptly translated into a faculty for applied communication, a discipline that finds its most advantageous position in a media-driven world where social networking, media creation, computer-mediated communication and digital economy rise to prominence. FAC extends the learning opportunities on campus by incorporating professional internship and practical exposure to give student transformational experiences and confidence to join the workplace. Our programme is unique

PROGRAMME OBJECTIVES

At the end of this course, the participants will be able to:-

- discover and learn about robots technology
- learn about an overview of robotic arms that are commonly used in factory automation, as well as advanced mobile robots and the concepts of robotics process automation (RPA)
- understand the relevancy of RPA best practices in IR 4.0

COURSE CONTENT

This course will cover

- Overview and understanding of robotics (components, classification and characteristics)
- Concept of direct and inverse kinematics
- Applications of robot in smart factory and industrial robots: 5-axis articulated robotic arm, spherical robot and more
- Working with robotic arms and defining a robot work cell
- Pick-and-place operation and trajectory planning
- Introduction to robot dynamics and hands-on: robotic arm control for manufacturing
- Mobile robots for industry 4.0: Sensors, actuators and controllers for mobile robots
- Localization and mapping techniques and path finding algorithms
- Case studies: AI service robots
- Robotics process automation
- Overview of RPA tools and solutions
- RPA implementation plan in production and RPA best practices
- Case studies: Factory automation

ABOUT THE COURSE

Industry 4.0 is a term given to the idea of smart factories where machines are augmented with web connectivity and connected to a system that can visualize the entire production chain and make decisions on its own. Although industrial robots have been performing complex and repetitive tasks on production lines for years, they have evolved dramatically in recent years, becoming much more autonomous and flexible. The trend of industrial robotics is towards the insertion of collaborative robots into the production lines. These new generations of robots are capable of interacting with each other and cooperate with humans without the need of safety restrictions that have been applied so far. This course is designed to enable interested participants to learn about basics on robotics technology.

Robots are conceived to help people with tasks that would be difficult, unsafe, or boring for a real person to do alone. A robot is machine that can be programmed to perform a variety of jobs, which usually involve moving or handling objects. Robots can range from simple machines up to highly complex, computer-controlled devices. This course provides an overview of robotic arms that are commonly used in factory automation, as well as advanced mobile robots and the concepts of robotics process automation (RPA) in the context of industry 4.0.

ABOUT MALAYSIAN TECHNICAL COOPERATION PROGRAMME (MTCP)

The Malaysian Technical Cooperation Programme (MTCP) was initiated at the 1st Commonwealth Heads of Government Regional Meeting (CHOGRM) for Asia Pacific Region held in Sydney on February 1978. It was officially launched on 7th 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).

The MTCP emphasises the development of human resources through the provision of training in various areas which is essential for a country's development. These areas include public administration, good governance, health services, education, sustainable development, agriculture, trade and investment, ICT and banking. As of 31st December 2019, 34,415 participants from 144 recipient countries have benefited from the various programmes offered under the MTCP.

For more information at MTCP website:
https://mtcps.com.kln.gov.my/mtcps.com/online/about_mtc_p

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);
- To promote technical cooperation among developing countries (TCDC).

TYPE OF ASSISTANCE

- Short-term specialized courses
- Long-term courses (Scholarships)
- Technical Assistance
- Dispatch of experts

CONTACT DETAILS

For further enquiries, applicants may contact the following MMU Secretariat:

DR. ONG SUE LYN

Email: slong@mmu.edu.my
TEL: +603 8312 5534

Ms. SUHAILA ABDULLAH

Email: suhaila.abdullah@mmu.edu.my
TEL: +606 252 3141

CLOSING DATE: 01 MAY 2020



**INDUSTRY REVOLUTION AND
ROBOTICS & AUTOMATION
(IRRA)**

02 Sept – 13 Sept 2020

MULTIMEDIA UNIVERSITY

