



## PROJECT NOTIFICATION

Ref. No.: 22-CP-42-GE-DLN-A-PN2200053-002

<b>Date of Issue</b>	01 June 2022
<b>Project Code</b>	22-CP-42-GE-DLN-A
<b>Title</b>	APO e-Course on Digital Manufacturing
<b>Launch Date</b>	30 September 2022
<b>Hosting Country(ies)</b>	APO Secretariat
<b>Modality</b>	Digital Learning
<b>Implementing Organization(s)</b>	APO Secretariat
<b>Participating Country(ies)</b>	Open
<b>Overseas Participants</b>	Not Applicable
<b>Local Participants</b>	Not Applicable
<b>Qualifications of Participants</b>	Open
<b>Nominations of Participants</b>	Not Applicable
<b>Closing Date for Nominations</b>	Not Applicable

## 1. Objectives

- a. Understand digital transformation in the manufacturing sector with a focus on SMEs.
- b. Impart knowledge on IoT, AI, and industrial robots as key technologies supporting digital transformation in businesses.
- c. Showcase the adoption and success stories of digitalization in SMEs.

## 2. Background

Digitalization continues to be a major strategy to raise productivity and competitiveness of industries. According to a WEF survey in 2021 on SMEs in ASEAN countries, more than 85% of SME owners recognized the importance of digitalization in business operations and postpandemic economic recovery. Digitalization of SMEs in the manufacturing sector is especially crucial as it helps to optimize their resources while facilitating deeper integration in supply chains for greater efficiency in the economy. Digital upgrading in manufacturing has therefore become indispensable.

However, SMEs face constraints due to lack of awareness, resources, and technical capacities. An OECD publication in 2021 indicated that SMEs lagged behind larger enterprises. Now that cost-effective IoT technologies and AI solutions are available on the market, new opportunities have emerged for SMEs to leapfrog in their digital transition.

This e-course will impart fundamental knowledge of digital transformation of SMEs in the manufacturing sector with the introduction of IoT, AI, and robotic applications as references for initiating their digital upgrading.

## 3. Modality of Implementation

- a. The course is offered through the APO e-learning platform: <https://www.apo-elearning.org>
- b. Participants should register on this portal and create their own accounts.
- c. Certificates of completion will be provided for those who satisfactorily complete all the modules of the course, including quizzes and a final examination.

## 4. Scope and Methodology

The course will comprise five modules:

Introduction

Module 1:  
IoT and digital transformation in the manufacturing sector

Module 2:  
Applying IoT technologies

Module 3:  
Leveraging the power of AI

Module 4:  
Applications of industrial robots in SMEs

Module 5:  
Good practices of SME digital innovation in Japan

Self-assessment quizzes and a final examination

### Methodology

Module study, additional study material for participants, quizzes for self-assessment, and a final examination.

## **5. Requirements**

- a. Have necessary devices and software comprising a computer/smartphone, updated browser, microphone, and speaker or headphones.
- b. Access to internet connections.
- c. Completion of all the modules, quizzes, and final examination.
- d. The APO e-certificate will be given to participants who score a minimum of 70% on the final examination.

## **6. Financial Arrangements**

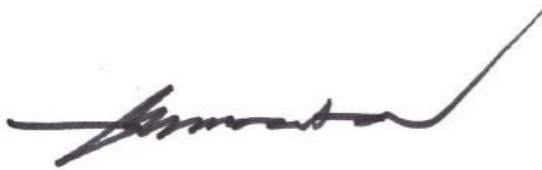
The APO will meet the assignment costs for resource persons to develop the course modules including quizzes and a final examination.

## **7. Actions by APO Members**

- a. Promote the courses nationwide.
- b. Provide the link to the APO e-learning platform on NPOs' websites and social network services.

## **8. Actions by the APO Secretariat**

- a. Identify and assign the resource person(s) to develop the course.
- b. Announce course commencement on the APO website and social network services.



Dr. AKP Mochtan  
Secretary-General