



## PROJECT IMPLEMENTATION PLAN

<b>PN Issue Date</b>	12 November 2019
<b>Project Code</b>	19-IN-06-GE-DLN-A-01
<b>Title</b>	Self-learning e-Course on Basic Smart Manufacturing 101 in a Blockchain-driven Era
<b>Reference</b>	Project Notification 19-IN-06-GE-DLN-A dated 8 January 2019
<b>Timing and Duration</b>	23 December 2019–31 December 2020 (13 months)
<b>Venue</b>	Member countries
<b>Implementing Organization(s)</b>	APO Secretariat and National Productivity Organizations Organizations (NPOs)
<b>Number of Participants</b>	Minimum 400 participants
<b>Self-registration</b>	<p>Self-registration opens from 10:00 AM Japan Standard Time on 25 December 2019 on the eAPO web portal: <a href="http://eAPO-tokyo.org">http://eAPO-tokyo.org</a></p> <p>Note: Participants can register directly from this portal on the APO website. Those who are already registered can access the course by using the assigned username and password. If you have forgotten your username and password, please refer to the help page on the home page of the portal.</p>

## 1. Objectives

The objective of this course is to introduce participants to the concepts of smart manufacturing using blockchain solutions. Starting with an overview of current digital transformations in manufacturing processes including blockchain-related technologies, participants will be able to examine the evolution of blockchain infrastructure components from an end-user perspective and understand the relevance of blockchain technologies to achieve data-driven manufacturing. In particular, this course is intended to:

- a. provide a basic understanding of blockchain concepts;
- b. introduce case studies of blockchain applications with a particular focus on manufacturing;
- c. enhance business processes through the deployment of blockchain solutions; and
- d. explain the potential of blockchain solutions for better data protection, enhanced traceability, and securitizing assets.

## 2. Background

Blockchain solutions are widely regarded as an exponential technology. The potential of blockchains across traditional industries has been widely discussed and is rapidly impacting APO member countries in all sectors and aspects of people's lives. All countries face challenges in addressing the wide-ranging implications of blockchains and prioritizing targets, resources, and policy measures for digital transformation. It is thus necessary to establish a holistic understanding of the blockchain concept and its attendant solutions and develop strategies in response to the opportunities and challenges of distributed ledger technology (DLT).

Aligned with the transformation program of the APO, this course aims to introduce the background, concept, and applications of blockchains and examples of their use in various economic sectors. The course will raise awareness of blockchain solutions across different sectors and enhance the understanding and decision-making processes of participants in efforts to increase business performance and improve productivity through new disruptive digital technologies.

## 3. Scope and Methodology

### Scope

The course will cover the following modules:

- Module 1: Overview of Blockchain Technologies
  - Module 2: Current Status and Classification of Blockchains
  - Module 3: Application Scenarios for Blockchains
  - Module 4: Overview of Supply Chains and Blockchains
  - Module 5: Overview of Industry 4.0
  - Module 6: Smart Manufacturing and Blockchain Solutions
- Graded Exercises

### Methodology

Module study, additional study material for participants, short quizzes for self-assessment, and graded exercises to qualify for the APO e-certificate for eligible participants.

## 4. Qualifications of Candidates

The target groups are consultants, government officials, and entrepreneurs primarily in the manufacturing industry who are interested in learning about the fundamentals of blockchains for the manufacturing sector.

## 5. Eligibility for e-Certificate

A minimum score of 70% on the graded exercises is required to qualify for the APO e-certificate.

Note: Participants from nonmember countries are welcome to take the course for self-development, although APO e-certificates will not be provided.



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Secretary-General