

Implementing Industry 4.0 in the Indian Context

Date: 22 to 26 November, 2021

Time: 1340 Hrs to 1700 Hrs (Online Mode)

INTRODUCTION

Industry 4.0 or "Smart Manufacturing" is fast becoming an inevitable evolutionary step for "future compatibility" for any Manufacturing Facility globally. Most of the Indian Industry is presently struggling to figure out how to get started into this "Digitalization" drive economically, and how to retrofit / integrate existing machines with Industry 4.0. Industry 4.0 is perceived as an expensive proposition to implement and this has caused many industries to step aside from implementing this new methodology.

To illustrate, develop confidence and show the way forward, IMTMA has now an I4.0 facility comprising of common manufacturing CNC Machines and Automation, where most aspects can be practically demonstrated. The concepts shown here could be readily scaled up by Industry.

To extend the benefits of experience and competency in Industry 4.0; Indian Machine Tool Manufacturers' Association (IMTMA) is organising a 5 day online training on "Implementing Industry 4.0 in Indian Context"

Special Offer: Participants will be provided FREE ACCESS to IMTMA Elearning course on "Overall Equipment Effectiveness" (OEE) towards continual learning and up skilling. Access will be valid from 22 Nov to 06 Dec 2021

FOCUS AREAS

- What is Industry 4.0
- Nine elements of Industry 4.0
- Potential benefits on implementing Industry 4.0
- Why data monitoring is so important?
- Retrofitting of Smart Sensors at existing Manufacturing Equipment
- Data acquisition • IIOT and cloud communication Gateways
- Applications of AR/ VR/ MR
- Application development of AR/ VR/ MR Machine Networking Protocols
- Data Analytics and Integration
- Live Data Gathering and Communication
- Live Demo of I4.0 at IMTMA Technology Centre Bangalore • Options and approaches to implement I4.0
- Real Time Industrial Case Study examples

KEY TAKE AWAYS

Understand global evolution of Industry 4.0 / Smart Manufacturing

After undergoing the programme, the participants will be able to -

- Figure out what part of it is relevant and useful in own context Be able to get idea of benefits
- Get insights into Smart Sensors, RFID and other technologies
- Manage Sensors and Gateways Understand the IIOT, Cloud computing and edge computing
- Plan for Digitalization of Manufacturing Equipment such as: CNC Machines as well as legacy machines
 - Assembly
 - Inspection

 - Automation
- System Integration
- Manage Sensors, Gateways and CLOUD
- Configure Reports and Dashboards

FEE PER PARTICIPANT (PER LOGIN)

+18% GST IMTMA Members/ Micro Companies/ Individuals/

Rs. 10000/-

Educational Institutions / Students/ IMTMA Non Members/Others

Overseas Participants

USD 400/-

Group Concession: 10% for 3 to 5 and 15% for 6 and more delegates being nominated from the same company

FACULTY

Engineering Solutions. Mr. Avinash Khare is presently working as a Consultant Head for IMTMA Pune Technology Centre for last 5 years; he has been

This training will be delivered by Industry Experts from IMTMA, Pepperl+Fuchs, Maxbyte Technologies, AMT and Robert Bosch

designing, developing content and delivering wide range of Training Courses as a Faculty. He is Electrical Engineer by Qualification and he has worked for over 33 years at Tata Motors Pune in various capacities ranging from R&D in Industrial Electronics, Machine Maintenance, Technology Procurement, Head of Machine Shops, Tool Room Shop Head, Head of Die Design and Champion in Business Excellence. He has taught Instrumentation and Bio Medical Instrumentation at Pune University as part time faculty. The program shall be co-delivered by **Mr Sudhanshu Kantoor**, General Manager, Product Management - Factory Automation at

Pepperl+Fuchs India. He is passionately involved in the field of Industrial Automation for over two decades. An avid software programmer in control automation, he brings in hands-on and supervisory experience in projects involving PLCs, Drives, Remote I/O and SCADA based systems, machines/process plants throughout India and also overseas. Avid enthusiast on technology, specially in the domain of networking and data communication. Working across the control platforms and leading implementation of I4.0 solutions for P+F Factory Automation business in India. The program shall be co-delivered by Mr Rajesh Bhat, He is currently working as Product Manager - Industry 4.0 with Robert Bosch

Engineering & Solutions Pvt Limited. He is a Graduate in Electronics & Communication, with a professional experience of over 17+ years of experience in Industrial Automation and Manufacturing, Solution Architecting and Implementing Industry 4.0 solutions, Experience in Manufacturing Execution Systems (MES) & Industrial Automation products. The program shall be co-delivered by Mr. Shaurabh Kumar Singh. He is an R&D Engineer presently working for The Association for Manufacturing Technology (AMT). His current focus of research includes Manufacturing Standards and Protocols like MTConnect, OPC UA

and SparkPlug B. He graduated with an MS in Industrial and Systems Engineering from North Carolina State University, US in 2017 and holds a BTech in Mechanical Engineering from Vellore Institute of Technology, Vellore. He has over 4 years of experience in the field of smart manufacturing including model based standard development, information modeling, machine connectivity and automation, and decentralized digital manufacturing cell orchestration. The program shall be co-delivered by Mr.Vamsidhar Sunkari. He is Sr. Solutions Architect at Bosch Augmented Reality Platform and

Solutions. His current role is to conceptualize and Architect Augmented Reality Solutions for multiple domains (Automotive, Industry 4.0, Consumer Electronics, BIM, etc...). He has about 17 years' experience in R&D and about 10 years' experience in Deploying Commercial Projects using Visual Computing Technologies (AR/VR, Computer Vision, Deep learning, Gesture Recognition). He has Masters from IIT Bombay and filed 10+ patents in the area of Augmented Reality and Computer Vision. The program shall be co-delivered by Mr.Krishnan M.

Data Science & Integration Ensuring the success of Data Science solutions for Industries A Manufacturing professional turned Data Scientist with domain expertise in Automotive, HVAC and manufacturing industry, Krishnan

Mahadevan drives the success of Maxbyte's Data science solutions for industries, ensuring the transformation to insight-driven industries.

The program shall be co-delivered by Mr.Gift Selvin T. **Application Development for AR**

ENABLING INDUSTRIES WITH IMMERSIVE TECHNOLOGIES FOR DIGITAL EXPERIENCE To help the manufacturers in speeding up the production process, with insights for predictability, increasing asset efficiency, service

efficiency and continue to accelerate with transformative XR technology, offers solutions and products to change the way people work and to

implement, realize the outcomes and values of these immersive technologies. The program shall be co-delivered by Ms.Revathy J. **Management of Digitization Overview**

ENSURING THE MANUFACTURER AND STUDENTS ARE SUCCESSFULLY UPSKILLED IN INDUSTRY 4.0 To upskill the manufacturers and students towards Industry 4.0, as the Product Owner - Revathy I drive The Factory Science as the learning

solution of Maxbyte to upskill the Manufacturers and the students who will jointly define future of the industries, successfully deliver solutions, systematically transform and ensure incremental business value along the journey.

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