



AVENTIS  
LEARNING GROUP

# Automation in Industry 4.0 Software & Hardware

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# Introduction

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This course on Automation in Industry 4.0 explores advanced software and hardware automation technologies at a high level. It aims to equip you with a comprehensive understanding of the transformative impact of these technologies on modern industries, blending theoretical insights with practical applications, and fostering innovation-driven thinking for future challenges; preparing students for the cutting-edge industrial advancements of the 21st century.

# Learning Outcomes

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**Upon completion of this course, learners will be able to:**

- Understand digitization strategies to effectively conceptualize and apply these technologies.
- Skills-based learning objectives: what participants will be able to do at the end of the course
- Acquire strategic planning skills for digital transformation in industrial settings.
- Develop critical analysis skills for evaluating automation technology implementations.
- Enhance problem-solving abilities in software and hardware automation contexts.

# Who Should Attend?

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## **This course is suitable for:**



- Senior management, business owners and company executives, offering a comprehensive high-level view.
- Learners who are interested to find out more insights and knowledge to innovate and lead in the evolving landscape of industrial technology.

# Course Outlines

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## Intro

Introduction & Design Thinking (HCI statement)

## All About Data

- Digitization, Digitalization, Digital Transformation
- Industry 4.0
- Automation S/W H/W – an introduction

## Software Automation

- Metaverse
- Robotic Process Automation – Power Automate

## Prototyping

Design Thinking – Rapid Prototyping cf. with Design Thinking

## Hardware Automation

Lecture only – Wearable technologies, industrial robots, Automated Guided Vehicles (remote control cars), 3D printers or printing pens, self-checkout kiosks, medical devices (AED, BP, MRI / CT scanners), vending machines, surveillance systems

[For Demos, we will need to invest in some products such as Sphero bolt, 3d printer]

## Jobs & The Future

- Systems Thinking – an introduction
- Work in 4 quadrants – organizational and employee standpoint

## Outro

- Summary and Wrap-up

# Course Details

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**1 Day**  
**9am - 5pm (Classroom)**



**Classroom** at Holiday Inn  
Orchard City Centre/  
Concorde Hotel



**(65) 6720 3333**  
**training.aventis@gmail.com**



**\$680** Before GST



# Trainer's Profile

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**Yang Yen Thaw**

Yang Yen Thaw adopts a multi-disciplinary practice, in his work areas as a practitioner, consultant, and a teacher. The approach has enabled him to see a macro-perspective connecting various business areas. To this end, he has studied and been certified as AAE (Associate Adult Educator), ACLP+ACTA certified adult trainer, corporate lawyer, registered management consultant (RMC), and in several technical disciplines. He has held senior management and executive positions in management and law in listed as well as private limited companies with businesses spanning Australia, China, France, India, Japan, Malaysia, New Zealand, Singapore, Thailand, UK, USA, and most Southeast Asian countries. He has also run his own law firm for 12 years adding to his experience.

Yen Thaw has trained over 3000 adults in the past 3 years and has had much experience in dealing with ground staff all the way to the CEO and board of directors. Having to present a wide variety of sectors and industries before various entities (such as government authorities, companies, CXOs, judges, mediators, arbitrators, police, etc.), his diverse experience in business knowledge, skills, and engagement has given him a holistic and deep training arsenal to quickly learn, contextualize and present it to various settings and different levels.