

Virtual Half Day Course on **EXPLORING THE WORLD OF AUTONOMOUS ROBOTICS: TRANSFORMING THE FUTURE OF MANUFACTURING**

ORGANISED BY:
ENGINEERING EDUCATION TECHNICAL DIVISION, IEM

BEM APPROVED CPD: APPLYING

REF NO: APPLYING

SPEAKER

Ir. TS. SUKHAIRUL NIZAM BIN ABDUL RAZAK



**8 FEBRUARY 2025, SATURDAY
9.00AM - 1.00PM**

| | ONLINE (Log-in for registration & payment: www.myiem.org.my/member/login.aspx) | NORMAL FEE (by fax & email) Payment by cash, credit card and bank-in |
|-----------------------------|--|---|
| IEM Student Member | 40.00 | 50.00 |
| IEM Graduate Member | 75.00 | 90.00 |
| IEM Corporate Member | 125.00 | 150.00 |
| Non-IEM Member | 240.00 | 300.00 |

SYNOPSIS

This workshop will take you on a journey through the fundamentals of autonomous robotics, showcasing how these cutting-edge technologies are transforming manufacturing processes. From real-world application in assembly and quality control to overcoming challenges in implementation, this workshop offers valuable insights tailored for aspiring and experienced engineers alike.

You'll also get a glimpse into the future of robotics in manufacturing, including smart factories and human-robot collaboration in Industry 5.0. Whether you're looking to enhance your knowledge or explore new career possibilities, this webinar is your gateway to understanding how autonomous robotics is shaping the future of work.

WHY SHOULD YOU ATTEND THIS WORKSHOP ?

- Understand the basics and advancements in autonomous robotics.
- Learn real-world applications and industry use cases.
- Gain insights into overcoming challenges in robotics integration.
- Discover emerging trends shaping the future of manufacturing robotics.

WHO WILL BENEFIT WITH THIS WORKSHOP :

- Engineering students with an interest in manufacturing industries.
- Engineers and professionals eager to explore robotic integration.

Cancellation Policy

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

Personal Data Protection Act

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

KEY TOPICS COVERED FOR THIS WORKSHOP:

1.The Fundamentals of Autonomous Robotics

Content:

- a. What are autonomous robots?
- b. Key technologies: sensors, actuators, AI, and machine learning.
- c. Evolution of robotics in manufacturing.

2.Applications of Autonomous Robotics in Manufacturing

Content:

- a. Autonomous robots in assembly, material handling and inspection.
- b. Case studies from leading manufacturing sectors.

3.Challenges and Opportunities in Implementing Autonomous Robotics

Content:

- a. Barriers to adoption: cost, skills gap, and integration.
- b. Overcoming challenges: training, collaboration, and innovation.

4.Future Trends in Autonomous Robotics for Manufacturing

Content:

- a. Robotics and Industry 5.0.
- b. Smart factories and human-robot collaboration.

SPEAKER'S PROFILE



Ir Ts Sukhairul Nizam Abdul Razak received an early education at SMK Methodist ACS Klang Selangor, UTM Skudai in Bachelor of Mechanical (Aeronautical) Engineering and MBA from Charles Sturt University Australia. Registered as Asean Chartered Professional Engineer (ACPE), Professional Mechanical Engineer with practicing certificate (PEPC) since year 2016 with Board of Engineers Malaysia and registered as Professional Technologist with MBOT since year 2020. Started career at Proton's Manufacturing since 1995 as RND's body design engineer follow with other positions in various departments in Proton Edar for nearly 18 years such as a Car Body Design Engineer, Branch Sales Manager, Manager Sales Standard, Manager Warranty Operations, Manager Equipment Tools & Calibration, Head of Division Office and worked with Accenture Malaysia for Daimler Group's project. He was a Regional Director for Leanmax Pro Sdn Bhd, was a Senior Lecturer for City University Malaysia, appointed as Programme Coordinator for First City University College and as Managing Director for Enviroklar Tech Sdn Bhd. Ir Ts Sukhairul Nizam has experienced designed, developed automotive components as well managed anti-corrosion and painting development, aerodynamic development, and crash test development for the national car company. Ir Ts Sukhairul Nizam is also specialised in automotive sales training or coaching and managing product recall for automotive industry.