



**UniSHAMS**



**InnoGlobal**

InnoGlobal in partnership with Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah (UniSHAMS)

# Executive Certificate in Automation for Industry 5.0

## BACKGROUND

The collaboration between UniSHAMS, the Kedah State government, Kulim Hi-tech Park and its representative body KITA and InnoGlobal was initiated following an introduction by the Malaysian Ambassador to Ireland.

Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah (UniSHAMS) is a private Islamic university located in Kuala Ketil, Kedah, Malaysia. UniSHAMS offers a wide range of programs, including undergraduate and postgraduate degrees in fields such as Islamic studies, law, management, education, information technology, medicine, and health sciences.

InnoGlobal is a skills and technology institute dedicated to human capacity development at scale, developing, coordinating, managing and delivering up/re-skilling initiatives globally.

Following discussions, a private/public partnership model has been developed which culminated in the signing of a Memorandum of Understanding (MOU) in early 2025. The MOU between UniSHAMS and InnoGlobal will address Skills Needs to include Advanced Manufacturing, Automation, Digitalisation, Green Transition, Sustainability, AI, and Cybersecurity for the high-tech manufacturing sectors.

Joint programmes will be developed in these areas which meet the strategic objectives as set out in national Malaysian and regional Kedah State government policy. The collaboration will also include considerable input from enterprise which in the first instance will be focused on the Kulim Hi-tech Park.

The project which has been designed to be implemented on a phased basis will commence in November 2025 with a number of Kickstart programmes in the areas of Data Science, Analytics, Digitalisation and Automation.

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## WHY DO THIS COURSE

Malaysia is rapidly transforming its manufacturing and digital sectors through policies like Industry4WRD and the National Industrial Master Plan 2030, creating a fertile ground for innovation. The digital transformation market is set to exceed USD 10 billion by 2025, opening vast opportunities in automation, cybersecurity, and data analytics.

With up to 30% of jobs impacted by AI, reskilling is critical, and this program's mix of e-learning, live lectures, and hands-on workshops ensures you stay ahead.

Malaysia's strong commitment to a green transition toward net-zero emissions by 2050 is reshaping industries and driving sustainable growth.

This inaugural program equips you with the skills to lead in this dynamic, future-ready environment.

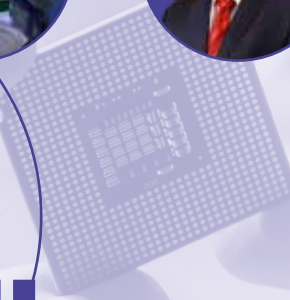
The programme focuses on enhancing learners' knowledge, skills and competencies associated with the concepts of the smart factory and the evolution of process manufacturing from a traditional reactive process to the emergence of Industry 5.0. Learners will engage with the current and future trends in manufacturing; the application and impact of greater use of technology, data analysis and visualisation on current performance; the impact on organisations and their levels of maturity to complete such transformations as well as ethical and corporate social responsibilities associated with such changes.

**“** *The launch of the Kickstart Programmes signifies our shared vision for empowering individuals through quality education and meaningful global partnerships.* **”**

**Professor Amy**  
Vice Chancellor & Chief Executive  
UniSHAMS

**“** *InnoGlobal is very proud to partner with UniSHAMS and to bring together our industry expertise and skills co-ordination capabilities with UniSHAMS great academic capabilities for the benefits of all industry and learners in the Kedah region.* **”**

**Professor Ian Jones**  
Founder & Chief Executive  
InnoGlobal



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## OUR PROGRAMME

This programme is an introduction to the skills and competencies associated with Industry 4.0, smart semiconductor manufacturing, digital transformation. These skills include integration of smart technologies, processes and data.

Learners develop competencies in process digitalisation, data management, analytics and visualisation and the application of these skills to a manufacturing environment.

It also introduces learners to Industry 5.0, incorporating human-centricity, sustainability and resilience. going beyond Industry 4.0's focus on digitalisation and automation.

Anyone with experience in high-tech manufacturing and graduates with an interest in the process manufacturing industries are strongly encouraged to apply for the course.

- **Industry-Relevant Skills:** The curriculum covers the latest technologies such as automation, robotics, and big data management, ensuring you gain skills that are highly sought-after in the manufacturing and digital industries.
- **Blended Learning Approach:** With a blend of e-learning, live lectures, hands-on workshops, and remote labs, you'll experience a variety of learning methods that reinforce your understanding and prepare you for real-world applications.

- **Focus on Digital and Green Transformation:** You'll learn how digital tools and sustainable practices can reshape manufacturing processes, positioning you as a forward-thinking professional in the era of smart factories.
- **Enhanced Career Prospects:** Through dedicated sessions on competencies and soft skills for a digital workplace, the program not only builds technical expertise but also prepares you for leadership roles in the industry.
- **Practical Application with Emerging Technologies:** Gain hands-on experience with modern tools such as low code/no code solutions, generative AI, and robotic process automation, which are critical for the future of manufacturing.
- **Project-based assessment:** Designed around real-world use cases and industry-led skills needs, you will put your new skills to use with practical assignments and projects.
- **Executive Certificate in Automation for Industry 5.0:** successful learners on course completion will be awarded an Executive Certificate in Automation for Industry 5.0 by UniSHAMS and InnoGlobal.

Enrolling in this program will empower you to become a leader in the digital transformation of manufacturing, giving you a competitive edge in a global market where technology and sustainability are paramount.



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## HANDS-ON LEARNING

The objective of this programme is to equip learners with advanced knowledge and practical skills in modern manufacturing technologies, focusing on sustainability, innovation, and efficiency. By integrating hands-on experiences with cutting-edge Industry 4.0 tools—such as Internet of Things, AI, robotics, and data analytics—it prepares participants to drive positive change within industrial operations. Learners develop the ability to implement efficient processes, develop safety protocols, and promote environmentally responsible practices. This empowers them to contribute meaningfully to sustainable industrial growth and innovation, fostering a skilled workforce ready to meet the challenges of the future.

SmartLabs is our hybrid remote/virtual learning platform which allows learners to apply the concepts they have learned as they progress up our skills pyramid - from process digitisation at Novice level through digitalisation and smart manufacturing to Digital Transformation at Mastery level. The platform allows students to tackle current technological challenges in the industry: integrating IIoT devices and sensors with real-world industrial processing equipment, converting the data into useful process information, configuring process simulations and automating manufacturing processes using digital twins.



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# Executive Certificate in Automation for Industry 5.0

6-month programme



**UniSHAMS**

E-learning  
modules

Face-to-face  
Workshop

Live  
Lectures

Remote/Virtual  
Workshops



**InnoGlobal**

on-going coaching

## Foundations

- Automation Fundamentals
- Industrial Revolutions
- Lean & Quality Principles
- Workplace Safety & Health
- Intro to Industry 4.0
- Root Cause Analysis
- Electrical Systems
- Mechanical Systems
- Technical Diagrams

## Deep-dive

- Industrial Robot Operation
- Project Management
- Cybersecurity in Operations
- Intro to PLCs
- Robot & Machine Safety Systems
- Maintaining Automated Equipment

## Advanced

- Strategic Automation & Robotics
- Industry 5.0 Leadership
- Human-Centric Technology
- Leading Sustainable Operations
- Change Management for Tech Adoption
- Automated Logistics & Warehousing
- Automation for Servitization
- Agile & Reconfigurable Systems

## KEY DATES

Application  
deadline

31 Oct 25

Interviews

Oct -Nov

Kick-off

24 Nov 25

Face-to-face  
workshop

Feb 26

Program  
completion

May 26

## EMPOWER YOUR FUTURE IN HIGH TECH MANUFACTURING

Are you ready to lead the transformation in semiconductor and high-tech manufacturing? Join our program designed specifically for senior engineers, supervisors, site leadership teams and managers. This course is also suitable for graduates in cognitive disciplines with relevant work experience in a manufacturing environment.

## WHY ENROL?

- **Stay Ahead:** Equip yourself with cutting-edge skills that will keep you at the forefront of technological advancements.
- **Enhance Your Role:** Whether you work on the shop floor or in management, gain valuable insights and tools to drive operational excellence.
- **Transform Your Career:** Open new pathways for growth, innovation, and leadership in an ever-evolving industry.
- **Collaborative Learning:** Connect with peers and industry experts, sharing experiences and best practices that fuel success.



### Learn More - Register for Our Webinar

[Click here](#) or Scan our QR code below for more info.

URL: <https://www.eventbrite.com/e/1765551003579?aff=oddtcreator>



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### Be the catalyst for change in your organisation.

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