JTC anchors two A*STAR research institutes at Jurong Innovation District to grow advanced manufacturing ecosystem and launches new Sectoral Job Redesign Initiative to support businesses in I4.0 transformation

Singapore, 19 October 2023 – JTC and A*STAR today officially opened new facilities by A*STAR's Singapore Institute of Manufacturing Technology (SIMTech) and National Metrology Centre (NMC) at the Jurong Innovation District (JID), furthering the District's commitment to advance sustainable manufacturing technologies and deepen collaborations among industry partners and SMEs to fuel technology adoption. The two research institutes are sited at CleanTech Park's CT2B and CT3, respectively.

2. The facilities were opened by Minister for Trade and Industry Mr Gan Kim Yong during JTC's inaugural JID Day. The event saw some 300 industrialists participating in facility tours and industry sharing sessions at JID to learn more about and collaborate on I4.0 manufacturing technologies, workforce transformation and sustainable manufacturing practices.

3. The opening of the facilities by SIMTech and NMC starts a new wave of sustainable manufacturing at JID that will aim to realise net-zero emissions by 2045. The research institutes will partner the industry to co-develop capabilities and accelerate the move towards net-zero manufacturing.

- A*STAR SIMTech will co-develop high-value manufacturing technology and human capital with industry partners to enhance the competitiveness of Singapore's manufacturing industry. One of SIMTech's key initiatives is its Manufacturing a Net Zero Future initiative. It supports Singapore's collective efforts to reach net zero emissions by partnering with the industry in three key areas: improving resource efficiency in manufacturing, enabling circularity in the manufacturing ecosystem, and supporting the industry's transformation towards net-zero manufacturing.
- At its lab in JID, A*STAR NMC's measurement standards and research on data-driven sensor calibration provide reliable sensing of indoor air quality for energy efficient building ventilation, and on temperature and vibration fluctuations for reliable factory machine prescriptive maintenance and product quality prediction to reduce wastage in production. The enhanced accuracy of measurements and standards provided by NMC help to promote fair trade, a safer environment, productivity and product reliability.

4. In supporting businesses in their workforce transformation efforts alongside their I4.0 transformation, the Sectoral Job Redesign (JR) Initiative was rolled out. Driven by the trade associations and chambers and in partnership with Workforce Singapore (WSG), JTC tenants can receive enterprise-centric support to identify key productivity drivers, implement sector

specific solutions, and reskill their workforce to take on redesigned job roles in growth areas.

5. The participating companies can expect a structured and guided journey and will be provided with comprehensive assessments and solutions on the business, technology and organisation fronts. Through WSG's Job Redesign Reskilling Career Conversion Programmes (JRR CCPs), eligible companies can seek support for their workers in undertaking new or redesigned job roles. The JRR CCPs will identify job roles that are vulnerable due to business transformation plans and to equip existing workers with the required knowledge and new skills to take on higher-value or redesigned job roles impacted by business transformation.

6. Trade associations and chambers can leverage JTC's Industry Connect Office@JID as a platform to reach out to JTC customers and beyond on the Sectoral JR Initiative. The one-stop centre was launched in 2021 to help manufacturers redesign jobs and reskill their workforce, thereby accelerating their I4.0 transformation. With over 13,000 customers in various JTC industrial estates, JTC plays the role of effectively promoting business and workforce transformation to these companies by connecting them to relevant solutions providers, trade associations and chambers as well as government agencies, under its Industry Connect initiative.

7. Mr Frederick Chew, Chief Executive Officer, A*STAR, said, "A*STAR is happy to be an integral part of JID and to partner JTC in realising sustainable advanced manufacturing, in line with Singapore's Net Zero goal. A*STAR's SIMTech and NMC are committed to supporting partners at JID to push the boundaries of smarter, greener and more connected manufacturing."

8. Mr Tan Boon Khai, Chief Executive, JTC, said, "JID has gained ground and momentum in its development as a catalyst for the growth of an advanced manufacturing community. Today, it is a dedicated advanced manufacturing campus for more than 100 players along the value chain, from research and capability developers and advanced manufacturers to Industry 4.0 solution providers, training providers and institutes of higher learning. We are happy to officially inaugurate A*STAR's SIMTech and NMC into our JID community. The labs' programmes to support the development and adoption of technologies to make manufacturing more sustainable will further enrich our advanced manufacturing ecosystem."

9. Ms Dilys Boey, Chief Executive of WSG, said, "WSG is heartened to witness this significant leap towards advancing sustainability in manufacturing at JID, and we look forward to the fostering of further innovations and to assist local businesses in adopting advanced manufacturing technologies for a sustainable and competitive future. WSG is committed to support this transformation through reskilling initiatives and innovative workforce strategies, ensuring that our workforce is well-equipped to contribute to a more sustainable and technologically advanced industrial landscape."

For more information, please contact:

JTC
Ann Toh (Ms)
Senior Manager, Communications Department
Mobile: 97663043
Email: mei_shen_ann_toh@jtc.gov.sg

*A*STAR*
Doris Yang (Ms)
Manager, Corporate Communications Department
Mobile: 93675336
Email: yangscd@hq.a-star.edu.sg

Workforce Singapore
Elizabeth Lee (Ms)
Senior Manager, Corporate Marketing and Communications
Mobile: 82005010
Email: elizabeth_lee@wsg.gov.sg

About JTC

Since its inception in 1968, JTC has played a strategic role in ensuring Singapore stays innovative and dynamic amid global manufacturing trends.

As a government agency under Singapore's Ministry of Trade and Industry, JTC is paving the way forward for Singapore's industrial landscape with green and smart estate masterplans such as one-north, Seletar Aerospace Park, Jurong Innovation District, and Punggol Digital District. Our estates attract new investment and foster collaborative ecosystems that strengthen Singapore's position as an advanced manufacturing hub. We also drive innovation in the Built Environment sector by piloting new construction technologies. For more information on JTC, visit www.jtc.gov.sg.

About the Agency for Science, Technology and Research (A*STAR)

The Agency for Science, Technology and Research (A*STAR) is Singapore's lead public sector R&D agency. Through open innovation, we collaborate with our partners in both the public and private sectors to benefit the economy and society. As a Science and Technology Organisation, A*STAR bridges the gap between academia and industry. Our research creates economic growth and jobs for Singapore, and enhances lives by improving societal outcomes in healthcare, urban living, and sustainability. A*STAR plays a key role in nurturing scientific talent and leaders for the wider research community and industry. A*STAR's R&D activities span biomedical sciences to physical sciences and engineering, with research entities primarily located in Biopolis and Fusionopolis. For ongoing news, visit www.a-star.edu.sg.

About Workforce Singapore

Workforce Singapore (WSG) is a statutory board under the Ministry of Manpower that promotes the development, competitiveness, inclusiveness, and employability of all levels of the workforce. Its key mission is to enable Singaporeans to meet their career aspirations, take on quality jobs at different stages of life, and help enterprises be competitive and manpower lean. WSG's focus is on strengthening the Singaporean core and ensuring that Singaporeans are able to have better jobs and careers. WSG, in partnership with key stakeholders, also provides support to business owners and companies to enable them to transform and grow, while building a future-ready workforce. For more information, visit www.wsg.gov.sg.

Annex A: Factsheet on A*STAR's newly opened research facilities in JID

A*STAR Singapore Institute of Manufacturing Technology (SIMTech)

A*STAR SIMTech develops high-value manufacturing technology and human capital to enhance the competitiveness of Singapore's manufacturing industry. SIMTech's Manufacturing a Net Zero Future initiative supports Singapore's collective efforts to reach net zero emissions, by partnering the industry to co-develop capabilities and accelerate their move towards net-zero manufacturing in three key areas:

- **Improving Resource Efficiency in Manufacturing** (reducing indirect emissions) by enabling the industry to reduce energy, water, and raw material usage and hence waste in their production;
- **Enabling Circularity in the Manufacturing Ecosystem** (reducing indirect emissions) by creating new manufacturing modalities and building new value chains to convert waste or by-products from one manufacturing process into useful raw materials for another manufacturing process;
- **Supporting Industry's Transformation towards Net Zero Manufacturing** (reducing direct and indirect emissions) by guiding manufacturers in assessing life cycle impact and taking actionable steps to design or redesign their business models, processes, and products and services for sustainability.

Key SIMTech facilities in CleanTech Two Block B	
Model Factory @ SIMTech (MF)	MF was set up by SIMTech for companies to learn, experiment and co-create new technologies for factories of the future where automation, and total shopfloor visibility and control would be key. With SIMTech's shift to its new premises, the Model Factory has also been upgraded for the co-innovation of Industry 5.0 capabilities and technologies with our local enterprises.
Innovation Factory @ SIMTech (IF)	IF is a partnership between A*STAR and Enterprise Singapore. It helps local companies, especially SMEs and start-ups, in product design, innovation, development and commercialisation, to become product owners and move up the manufacturing value chain.
Next-Gen Manufacturing Process Lab	The Next-Gen Manufacturing Process Lab specialises in the R&D of cutting-edge manufacturing technologies in areas including 4D additive manufacturing, flexible forming, adaptive machining, advanced joining & surface engineering, hybrid & multi-materials manufacturing for extreme environments, and MedTech manufacturing. Its capabilities support SIMTech's partnerships with companies to sustain, transform and advance their businesses locally and expand internationally.
Additive Innovation Centre (AIC)	Hosted by A*STAR SIMTech and supported by the National Additive Manufacturing Innovation Cluster (NAMIC), AIC is a research and development hub of additive manufacturing technologies and innovations. AIC will support SIMTech's mission to partner companies in JID and Singapore, to drive the adoption of additive manufacturing technologies for a more globally

	competitive and resilient manufacturing ecosystem and more sustainable future.

A*STAR SIMTech's Manufacturing A Net Zero Future Initiative	
Improving Resource Efficiency in Manufacturing	**InnoArk** End-to-end systems integrator for the digitalisation of enterprise operations chains InnoArk partnered A*STAR SIMTech as a systems integrator leveraging the data-driven algorithms in SIMTech's Energy Efficiency Monitoring & Analysis System (E^2MAS), to provide turnkey solutions that drive savings in energy costs, and reductions in greenhouse gas emissions. Combining InnoArk's data acquisition capabilities with the data analytics technologies of E^2MAS, end users can identify hotspots of excessive energy usage and make actionable improvement decisions. To-date, this collaborative solution has helped businesses such as MNCs, LLEs and local SMEs (such as LHT Holdings and Sanwa-Intec Asia) achieve up to 20 per cent improvement in energy efficiency, 20 per cent reduction in greenhouse gas emissions, and 80 per cent reduction in reporting efforts.
	LHT Holdings Limited Manufacturer and supplier of RFID-tracked shipping and packing pallets LHT partnered A*STAR's SIMTech to introduce automation to its pallet assembly line, increasing production and the quality of pallets with more accurate nailing positions. Industrial Internet-of-Things (IIoT) sensors were also integrated into the assembly line to monitor and optimise the production of pallets. LHT adopted and deployed SIMTech's Energy Efficiency Monitoring & Analysis System (E^2MAS), to assess energy usage in real-time and identify hotspots of excessive energy usage of its pallet assembly and polishing machines.
	Sanwa-Intec Asia Pte Ltd Local SME manufacturing plastic products Sanwa-Intec adopted and deployed A*STAR SIMTech's Energy Efficiency Monitoring & Analysis System (E^2MAS) for its plastic injection moulding machines, as part of the company's plans to improve energy efficiency and reduce carbon footprint. With the implementation of E^2MAS, Sanwa-Intec was able to conduct real-time energy efficiency analysis, benchmarking, and comparison analysis.

Enabling Resource Circularity in the Manufacturing Ecosystem	**Singapore Airlines (SIA) and SIA Engineering Company (SIAEC)** The national carrier airline of Singapore and local engineering company specialising in aircraft maintenance, repair and overhaul services in Asia-Pacific As part of SIA and SIAEC's partnership with A*STAR SIMTech since 2012, an innovative approach was developed for stripping and remanufacturing copper trims from SIA Business Class seats, to achieve required appearances and enhanced durability. The first production line in the Southeast Asian region for this type of repair work was successfully established, resulting in a cost-effective chemical plating repair line for damaged copper trims which would otherwise have been discarded, reducing the amount of waste generated. New business opportunities were also created for local SME Applied Total Control Treatment (ATC) through technology transfer, creating capabilities for them to take over the repair work of copper trims.
	Applied Total Control Treatment (ATC) Local SME specialist in metal plating and surface finishing ATC partnered A*STAR SIMTech as the recipient of the technology transfer to take over and scale up the copper trim remanufacturing line developed by the SIA-SIAEC-A*STAR Joint Lab. Through the technology transfer, ATC gained new capabilities in polymer metallisation, complementing its existing expertise in metal plating and surface finishing. Since taking over the repair line, ATC has delivered more than 3,000 copper trims to SIA with zero rejection rate, with the revenue for this project estimated at $1 million over the next three years. A second phase of technology transfer to upgrade the repair line is currently in progress, to improve copper trim repair efficiencies and enable the repair of previously unrepairable parts, reducing even more waste.

A*STAR National Metrology Centre (NMC)

A*STAR NMC is the national measurement institute of Singapore, dedicated to advancing measurement science for an innovative and competitive economy. NMC conducts R&D in measurement science to enable innovation for emerging technologies. The enhanced accuracy of measurements and standards provided by NMC promotes fair trade, safe environment, productivity, high quality and reliable products. In particular, NMC's key focus areas on sustainability and green manufacturing include:

- **Sustainability in Advanced Manufacturing**

- **Low-Carbon Fuels**.
- **Evaluation of Greenhouse Gas Emissions**

Key NMC facilities in CleanTech Three	
Chemical Metrology Lab	A*STAR NMC's Chemical Metrology Lab was set up under Singapore's Chemical Metrology Programme (CMP) funded by the Ministry of Trade and Industry (MTI). The lab focuses on establishing gas standards traceable to the International System of Units (the SI) and supporting the industry in gas measurements for ambient and indoor air quality, emission control and mitigation, and industrial process control. In terms of sustainability, CMP has widened NMC's capabilities to include low-carbon fuel standards, emissions measurements for decarbonisation, and source tracing methods for verification of renewable fuel sources.
Liquid Flow Lab	NMC's Liquid Flow Lab provides accurate standards for liquid flow measurements. These standards are disseminated to various industries to ensure that their own measurements have traceability to NMC and the International System of Units (SI), promoting accuracy and consistency across different sectors and allowing international recognition. Through a multi-stakeholder working group, NMC worked with the Maritime and Port Authority of Singapore (MPA) and industry partners to develop a measurement methodology for the mass flow metering (MFM) system, which is now utilised in bunkering operations. NMC took the lead in determining the metrological requirements of measurements used in the MFM system, and these requirements formed a core part of a new International Organisation for Standardisation (ISO) standard that is globally accepted today. NMC's work supports building trust within Singapore's bunkering industry, enhancing the efficiency of bunkering operators, and promoting reliable measurement practices. The Liquid Flow Lab continues to support the MPA by verifying the accuracy of the MFM system via acceptance tests for bunker transfers. NMC is currently working with the Maritime and Port Authority of Singapore (MPA) to develop the methodology to verify the data integrity of the digital bunkering system, so as to further enhance transparency of bunkering in Singapore.
Singapore Standard Time Lab	NMC maintains the Singapore Standard Time (SST) which serves as a vital timekeeping cornerstone for the nation. The SST lab plays a pivotal role in advancing research on optical clocks in collaboration with the Centre of Quantum Technologies at the National University of Singapore (NUS), which are ultra-precise devices that measure time with hundredfold improvement over the existing clocks. Linked to the Coordinated Universal Time (UTC), SST provides an

	essential timing framework that supports Singapore's daily activities and ambitious research endeavours. Its accuracy is crucial not only for everyday tasks like financial transactions and transportation schedules but also for the cutting-edge scientific work that Singapore is actively engaged in

A*STAR NMC's key industry initiatives

i. Carbon emissions monitoring

NMC supported GAIT Global Pte Ltd on the development of new measurement methods for carbon emission monitoring. In this collaboration, NMC provided measurement expertise to confirm that GAIT's carbon flux system was properly calibrated, so that it could accurately monitor carbon emissions in a quantifiable manner. Additionally, NMC also aided GAIT in preparing their system to provide uninterrupted measurement data for real-time monitoring of carbon emissions, where companies can use the system to identify carbon hotspots and reduce their carbon footprint.

ii. Self-calibrating temperature sensors to improve the energy efficiency of chiller plants

NMC developed an alternative approach for quality assurance of sensors through self-calibration with an in-built physical reference. This self-calibrating temperature sensor was developed to monitor the energy efficiency of chilled-water based building cooling systems, where accurate temperature measurements are needed.

NMC's sensor will potentially help automate the currently labour-intensive process of calibrating the temperature sensors by eliminating the need to dismantle the sensor from the chiller system. It will also minimise the risk of sensor drift as such self-calibration can happen daily. Therefore, any sensor drift can be identified in a timely manner. As a result, up to 80 per cent savings in sensor maintenance costs can be achieved.

The self-calibrating temperature sensor has been licensed to ACEZ Sensing Pte Ltd for commercialisation. ACEZ has incorporated their temperature sensor and thermo-well technical expertise into the self-calibration concept. This integration in the temperature sensor assembly can perform well in field tests, meeting the designed objectives while also providing good response and mechanical strength to withstand various process conditions.

iii. Self-diagnosis and self-healing sensing quality assurance system

A common and long-standing challenge for the building sector is how to reduce energy wastage that is caused by improper ventilation control due to inaccurate sensor readings. NMC developed a self-diagnosis and self-healing (SDSH) indoor air quality (IAQ) sensor network technology that provides reliable sensing to measure the quality of sensors used for controlling localised ventilation in buildings. The technology continuously monitors the health of sensors, and automatically corrects any drifted sensor in real-time to ensure that the sensor data is accurate. Offering localised ventilation control tailored to actual demand, the system has achieved the targeted indoor air quality for a Green Mark Platinum building, with 20 per cent energy savings. This was demonstrated in a collaboration with the Singapore Management University (SMU) at their premises.

SDSH can also be applied to various manufacturing shopfloor sensors (e.g. temperature and vibration sensors) to ensure their sensing quality assurance, which is important for product quality and manufacturing process efficiency. Such a system is currently demonstrated in the Model Factory@SIMTech (MF).

Annex B: Factsheet on Jurong Innovation District

Jurong Innovation District Factsheet

Jurong Innovation District Artist's Impression

- Asia's leading Advanced Manufacturing hub with a growing ecosystem of research institutes and capabilities developer, technology and training providers, and advanced manufacturers.

- Singapore's largest living lab for new manufacturing technologies and solutions where ideas and technology are developed, prototyped, test-bedded and commercialised.

Master-planned and developed by JTC, Jurong Innovation District (JID) is a 600-hectare next generation district located along Singapore's western manufacturing belt. Opening in phases since 2019, the District expects to create 95,000 new jobs in research, innovation and advanced manufacturing.

Ready Ecosystem with Top Names in Advanced Manufacturing

With a ready ecosystem of advanced manufacturers, researchers, technology and training providers, our community is still expanding.

Hyundai's Mobility Global Innovation Centre is an open innovation lab that will develop future mobility technologies for global markets. Combining AI, Internet of Things (IoT) and advanced technologies, the lab will create a smart manufacturing platform and a pilot electric vehicle production facility. The 85,048 -square-meter facility is expected to complete by second half of 2023.

Bosch Rexroth's Regional Training Centre will offer a standardised training programme following the AHK (German Chamber of Industry and Commerce) framework. Bosch Rexroth will also collaborate with companies to testbed Industry 4.0 projects at the Centre and develop companies' expertise.

Shimano's Intelligent Manufacturing Plant will house a research and development hub for bicycle components. Its factory of the future will have a redesigned manufacturing floor with cell manufacturing concepts and real-time monitoring systems.

Makino's Additive Manufacturing Centre of Excellence undertakes knowledge and technology development of additive manufacturing for Makino Group globally, and acts as the incubation ground for future Makino additive manufacturing equipment.

Companies can leverage support from synergistic advanced manufacturing partners in JID to exchange knowledge and tap on resource sharing platforms to expedite their technology adoption and enhance capability development. This include:

- **Digital Capability Center**, where McKinsey & Company supports companies in their digital transformation journey through showcasing digitisation, experiential learning, and offering safe test beds.

- **A*STAR's Advanced Remanufacturing and Technology Centre**, which has collaborations with over 70 industry players, public sectors, research institutes and academia to implement and test advanced manufacturing solutions. It also creates prototypes and translate ideas into real-life applications.

- **Sodick Singapore Technology Centre**, which offers weekly technical advisory sessions on 3D printing and IoT for JID community. Companies interested in additive manufacturing can collaborate with Sodick in developing, testing and adopting new ideas and concepts.

Ready Pool of Skilled Talent

With ready access to more than 32,000 science, technology, engineering and mathematics (STEM) talent from Nanyang Technological University and a growing pool of startups, the manufacturing community can plug in and accelerate their commercialisation of new technologies.

Sustainability and Green Features

As a car-lite District, an 11-kilometre sky corridor dedicated to pedestrians, cyclists and potentially autonomous shuttles in the future, which will connect the entire district and provides seamless links to transport and activity nodes. The District will also be home to Singapore's first dedicated underground District Logistics Network, which will be developed to increase the efficiency of goods movement while freeing up spaces above ground for business and community use.

Set amidst a rich tapestry of lush greenery and biodiversity, JID will feature up to 40% green coverage with Jurong Eco-Garden and the upcoming Bulim Park.

For more information on JID, visit https://estates.jtc.gov.sg/jid

Annex C: Employer and Human Interest Profiles on Manufacturing sector

Employer Profile
Certact Engineering Pte Ltd Certact Engineering was established in 1968 as a privately owned and run precision engineering company based in Singapore with approximately 80 employees. The company has a diverse range of capabilities, extending beyond precision engineering to include services such as plastic fabrication, thermo-forming, plastic welding (PVC, PP, FRPP, PVDF, ABS, etc), plastic bending, anti-static coating, and plastic heat treatment. The company faced challenges in attracting and retaining local talent, as well as dealing with traditional production processes that limited productivity, and non-value-added work affecting throughput and revenue. To address these issues, Certact participated in various programs, including a job redesign pilot program with the Singapore Precision Engineering and Technology Association (SPETA) that was complemented with WSG's CCP for Advanced Manufacturing Engineer/Assistant Engineer and Operator. 7 local PMETs were placed under the job redesign reskilling aspect of the CCP. Certact Engineering revamped its strategy to focus on retaining existing staff, involving reskilling employees and redesigning job roles to support their Smart Factory initiative. Effective communication and structured on-the-job training were essential for the transition. Participation in WSG's programmes enhanced employees' adaptability to changes, boosting their confidence in acquiring the necessary skills for new job roles aligned with the company's objectives. These higher-value job roles offered improved career pathways, contributing to increased talent retention. Spokesperson: Daryl Chia, Assistant Director

CCP Profiles from Certact Engineering Pte Ltd	
No	**Profile**
1.	**Name:** Kim Lee **Age:** 53 **Designation:** Work Manager **WSG Program:** CCP for Advanced Manufacturing Engineer/ Assistant Engineer and Operator and Job Redesign Reskilling Kim Lee has an academic background in Mechanical Engineering and has been with the company since 2000, previously as a Senior Lead Tool-Room employee. In his current role as a Work Manager, Kim is responsible for various tasks, including identifying technical materials and real-time digital monitoring of stock levels, and monitoring and reporting on machine health and status. As Certact is transitioning into a Smart Factory, incorporating Industry 4.0 technologies like the Enterprise Resource Plan (ERP) system, Certact enrolled Kim Lee in the job redesign pilot program to acquire the necessary skills for his redesigned role. The ERP system enables real-time monitoring of business processes, enhancing productivity and decision-making. The program includes structured and on-the-job training (OJT), as part of WSG's CCP for Advanced Manufacturing Engineer/Assistant Engineer and Operator. The CCP, particularly the OJT component, enabled Kim Lee to quickly adapt to his new role, which involves working with the ERP system and performing data analytics.

	Kim Lee aspires to support the company's push towards a Smart Factory. His advice to those considering a career switch is to maintain a positive mindset, be open to continuous learning, and trust in the transformation plans of the company.
2.	**Name:** Koh Leh Shan **Age:** 32 **Designation:** Purchasing Manager **WSG Program:** CCP for Advanced Manufacturing Engineer/ Assistant Engineer and Operator and Job Redesign Reskilling Leh Shan has an academic background in Financial Accounting and has been with the company since 2013, previously as an Account Assistant. In her current role as a Purchasing Manager, her responsibilities include negotiating supplier contracts, managing supplier selection and data in the Enterprise Resource Plan (ERP) system, and collaborating with sales and finance teams to streamline payment processes, delivery orders, and invoice information. Driven by Certact's transformation into a Smart Factory incorporating Industry 4.0 technologies, including the ERP system, Leh Shan underwent job redesign reskilling with structured and on-the-job training (OJT), as part of WSG's CCP for Advanced Manufacturing Engineer/Assistant Engineer and Operator. During the OJT, Leh Shan maintained a positive mindset, remaining open to continuing learning and adaptation to an ever-evolving technological environment. Certact's clear and early communication about the ongoing transformation also helped mentally prepare Leh Shan and others for the reskilling journey. She benefited significantly from the program, and the hands-on approach helped her to acquire new skills for tasks like data analytics, and to quickly assimilate into her new job role. Leh Shan is enthusiastic about maximising the capabilities of the new ERP system to contribute to the company's push toward becoming a Smart Factory. To those considering a career switch, her advice is to embrace learning and look forward to contributing to the organisation's growth in the face of technological advancements.