

IWM 2024: List of Learning Journeys and Workshops

LEARNING JOURNEY OR WORKSHOP - OPTIONAL for Sep 27 (Fri): Interested participant is to **choose 1 event only, either** a LEARNING JOURNEY (shown in **Table 1**) **or** WORKSHOP (shown in **Table 2**). Due to the limited capacities of such events, and planning of logistics (as transport will be provided for venues outside of SP), **allocation of places will be done on a first-come-first served basis**. You need to **indicate your preference at the time of registration**, and you will be informed out the outcome at a later date. If you are not successful in your selected event, you may be offered another event subjected to availability.

Table 1. List of Learning Journey (choose ONE only; if not choosing a Workshop from Table 2)

Code	Organization	Theme	Details	Min Pax	Max Pax	Time	Duration (hours)
LJ1	Ngee Ann Polytechnic (NP)	Visit to Robotics Research & Innovation Centre (RRIC) & Synergy.Lab	At RRIC, the participants will be introduced to robotic projects that collaborate with industries (NParks, SingHealth, Moovita). These robotic projects are to support industry needs and to optimize commercial operations. At Synergy.Lab, the participants will learn the integration of solar energy and Electric Vehicle charging infrastructure. The Synergy.lab serves as an integrated 'control centre' for the various smart mobility technologies on campus, incorporating advanced data analysis and simulation capabilities. The lab facilitates research to enhance the ecosystem's efficiency by monitoring and analysing data such as solar power generation, as well as EV charging load and energy consumption	10	30	0930 – 1130	2
LJ2	Nanyang Technological University (NTU)	Visit to Gaia Sustainability Building @ NTU	1. 1. Tour of Nanyang Business School (NBS) and Net Zero emission building. 2. Sharing of NBS philosophy for the design of the Net Zero Emission Building	10	25	0900 – 1200	3
LJ3	National University of Singapore (NUS)	Sharing by Centre for Teaching, Learning and Technology (CTLT) and AI Singapore (AISG)	<u>Part 1 – 1 hr sharing by CTLT:</u> <ul style="list-style-type: none"> Major functions supported by CTLT (Professional Development, Instructional Technology) NUS AI + TEL initiative <u>Part 2 – 1 hr sharing by AISG:</u> Participants will get to deepen their knowledge and understanding of the latest AI methodologies, facilities, tools, and applications, from both the industry and government's perspectives.	1	35	0900 – 1200	3

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LJ4	Singapore Polytechnic (SP)	Pedagogical Innovation at SP Energy & Chemicals Training Centre (ECTC)	The SP Energy & Chemicals Training Centre an integrated training hub comprises of a suite of chemical engineering laboratories, which houses key unit operations typically found in the Energy & Chemicals sector. Participants will be able to learn about how authentic hands-on training are crafted for students to apply knowledge into real practice in a simulated safe environment. Participants will also learn the various digital tools that are used to support the training.	3	15	1000 – 1200	2
LJ5	Singapore Polytechnic (SP)	Visit to SP 5G & AIoT Centre and Smart Classroom from School of Electrical & Electronic Engineering (SEEE)	<p><u>Part 1 : 5G & AIoT</u> Learn interesting concepts through topics like 5G Overview, Introduction to AIoT.</p> <ul style="list-style-type: none"> Get to know the top 5G & AIoT uses cases and explore how features such as ultra-low latency, high speed connectivity, massive sensor data of 5G & AIoT can enable key drivers such as real time cloud computing, intelligent control and AI that are transforming your industry Engaging discussions on how 5G & AIoT together can benefit the company and workforce <p><u>Part 2 : Smart Classroom</u> Explore the smart learning space at EEE - an educational ecosystem that integrates advanced technology to facilitate a dynamic, interactive, and personalized learning experience. It's characterized by its adaptability, responsiveness, and ability to cater to the individual needs of students. This learning environment fosters a culture of connectivity, creativity, and innovation, which not only enhances the learning process but also prepares students for the digital world, making education a truly transformative experience.</p>	10	25	0930 - 1200	2.5
LJ6	Singapore Polytechnic (SP)	Advanced Manufacturing Learning Journey (AMLJ) including Aerohub Visit	<ol style="list-style-type: none"> Gain an insight about Singapore manufacturing industry landscape in terms of harnessing smart manufacturing technology Learn about how SP-AMLJ is bridging the skill gaps between Industry and IHL by fostering partnership with Industry Learn about how Aerohub facilities are used to support Diploma in Aeronautical Engineering. 	10	20	0900 – 1130	2.5
LJ7	Grundfos Singapore	Grundfos Sustainability Journey & Tour of Grundfos Innovation Hub	<p>Demystifying Grundfos' sustainability spirit, inherited from a Danish company and thrive in Singapore</p> <ul style="list-style-type: none"> Get to know Grundfos, be inspired by its sustainability journey, plus Q&A with Grundfos' colleagues Understanding of tool (Sizing + Energy Check) to optimize pumping systems Tour of Grundfos Innovation Hub to Experience new technology from Grundfos (2 applications / demo units) 	1	20	0930 - 1130	2.0

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Table 2. List of Workshop (choose ONE only; if not choosing a Learning Journey from Table 1)

Republic Polytechnic (RP)	Employing Game-Based Learning to Engage Students for Effective Learning in National Education and Current Affairs.	<p>Imagine a world where students are engaged in learning difficult subjects and appreciate the value of what they are learning. In reality, students inundated with National Education (NE) messaging and current affairs topics since young, have the impression that such lessons are dull and irrelevant to their lives.</p> <p>Our team found a solution that is working for us. “Diplomats... in Space!” is an innovative multiplayer card game that is designed to change this impression by immersing students in strategic and thought-provoking Game-Based Learning. Students will interact with game elements and gain insights into how their decisions can affect the outcomes, which mirror scenarios and events in the real world, as well as illustrate national and international initiatives and frameworks.</p> <p>In this workshop, participants will get to experience the game, appreciate how Game-Based Learning helps students understand complex issues and they will hear from the designers of the game, their experience and tacit knowledge in designing the game from concept to delivery.</p>	8	40	0900 – 1200	3.0
Temasek Polytechnic (TP)	Create an AI-enabled Chatbot for Personalized Learning	This hands-on workshop aims to explore how AI-enabled chatbots can engage learners in a personalised and human way, serving various educational purposes like knowledge acquisition, formative assessment, administrative tasks, and project guidance. The activities will focus on creating and deploying chatbots using Dialogflow without the need for any form of coding or programming skills. This training demonstrates the use of some basic features in Dialogflow and how to integrate the chatbot through Telegram, enhancing student engagement and achieving personalised learning. Join us to discover how to utilise rich media responses, like emojis, images, and hyperlinks, for a more meaningful chatbot experience.	3	12	0900 – 1200	3.0
Temasek Polytechnic (TP)	App in a Jiffy - for Educators	<p>In this workshop, participants will gain knowledge on how to develop a secure and customizable mobile app using Microsoft Power Automate and Power Apps.</p> <p>Currently, for some of the academic, project, and student-related routine tasks, human intervention is still necessary. Furthermore, the tasks are time-consuming, require a lot of manpower, and must be repeated every semester. The messages conveyed to the users—in the form of mass emails, reminders, and warnings—are also not personalized.</p> <p>By adopting end-to-end cloud automation platform technology in education, repetitive tasks and personalized messages can be automated and sent to users respectively. Additionally, less human intervention is required, thereby saving man-hours, minimizing errors, and increasing scalability. Furthermore, as this platform can be accessed anytime, anywhere, efficiency and productivity are improved to new heights.</p> <p>Pairing seamlessly with Power Automate, these tools become a powerhouse for automation. Say goodbye to repetitive tasks and hello to newfound efficiency.</p>	3	12	0900 – 1200	3.0