

Experience inter-cultural learning:
In-person, 1-Week industry visits and learning at the
Singapore campus of TUM



Ranked 1st in Asia and 3rd worldwide, Singapore has been consistently investing in state-of-the-art scientific and technological infrastructure to keep up with the rapid pace of the global change by digitising its economy to enhance the prosperity of their citizens. Since launching its Smart Nation Initiative in 2014, the nation has benefited from a government injection of S\$2.4 billion worth of smart technologies in both its public and private sectors. Apart from boasting the highest adoption rate in wireless broadband and tablet ownership, Singapore also ranked highly in research and higher education achievement including mathematics.





Programme Schedule

TIME		PROGRAMME
Monday	9am- 12pm	Lectures
	2pm - 5pm	Industry Visit
Tuesday	9am- 12pm	Lectures
	2pm - 5pm	Industry Visit
Wednesday	9am- 12pm	Lectures
	2pm - 5pm	Industry Visit
Thursday	9am- 12pm	Lectures
	2pm - 5pm	Industry Visit
Friday	9am- 12pm	Lectures
	2pm - 5pm	Industry Visit

Lectures and industry visits are subject to change and availability of the industry representative and lecturer delivering the lectures.



Industry Visits

Advanced Remanufacturing and Technology Centre (ARTC)

Advanced Remanufacturing and Technology Centre (ARTC) is a contemporary platform built upon strong public-private partnerships. In partnership with Nanyang Technological University (NTU), Singapore, ARTC has a membership consortium with over 95 members, ranging from global multinational corporations (MNCs), public agencies, small and medium enterprises (SMEs), to startups.

ARTC's expertise in advanced manufacturing and remanufacturing accelerates the transfer of innovation from applied research to industrial applications and solutions, building capabilities through collaboration with industry members in five industry pillars - Aerospace, FMCG and e-commerce, Energy, Land Transport and MedTech.

Yamazaki Mazak iSMART Factory

Witness cutting-edge automation and Industry 4.0 technologies in action. seamless integration of robotics, data analytics, and smart machining processes, showcasing how the future of manufacturing is being shaped. This immersive learning experience is to get inspired and with a deeper understanding of the evolving landscape of the manufacturing industry.



Industry Visits

The TUM Asia – FESTO Competence Centre for Digitalisation, Technology and Innovation (CDTI)

The TUM Asia – FESTO Competence Centre for Digitalisation, Technology and Innovation (CDTI) provides training, guidance and support to companies in ASEAN who wish to adopt, transit and transform their process, technology and organisational operations in the area of advanced digital manufacturing and energy efficiency. Supported by the Singapore Economic Development Board (EDB), the Centre will accelerate the transfer of skills and knowledge to the manufacturing industry in the region through Continuing Education & Training (CET) programmes, consultancy and an immersive Industry 4.0 experience centre that will provide a test-bed environment for companies to smoothly transit and transform their operations.

Siemens - Advanced Manufacturing Transformation Centre (AMTC)

The Advance Manufacturing Transformation Centre (AMTC) is the first of its kind hybrid competence centre that provides guidance, support and training to manufacturing facilities in Southeast Asia on their journey of adoption, transition and transformation towards advanced manufacturing.



Lectures

Sustainability for Manufacturing



Dr. Nithin-Narayanan

Dr. Nithin Narayanan is a seasoned senior management expert with proficiency in engineering and technology management. His accolades include prestigious awards like the Rolls Royce Gold and Green Awards for innovation and cost-saving initiatives. With leadership roles at Rolls-Royce and other key companies, he demonstrates excellence in project management, strategic planning, and revenue growth through sales initiatives.

Decision-Making in High-Stakes Environments



Mr. Bala Rukmangathan

Mr. Bala Rukmangathan is a versatile professional with experience as an Architect, Airline Captain, and CRM Instructor. His background includes extensive aviation experience with Scoot and Singapore Airlines, as well as entrepreneurship with SuperCharge.SG, a prominent Electric Vehicle Charging company in Singapore.

Data Analytics and AI for Manufacturing



Mr Spencer Kwan

Spencer Kwan Bun Man brings over 20 years of experience in Asia Pacific Business Development & Consulting, specializing in Enterprise Asset Management & Control Platform across various manufacturing sectors. He holds certifications as an Al Practitioner and works as a consultant driving digital transformation, IoT, and Al/ML adoption for business enhancement



Lectures

Cost Benefit Analysis for Sustainable Transportation



Dr. Andreas Rau

Dr. Andreas Rau is a Lecturer at TUM Asia, specializing in transportation engineering and sustainable development. With a PhD from Dresden University of Technology, he has extensive experience in research and teaching, focusing on public transport planning and infrastructure assessment. He actively contributes to MSc programs and professional organizations, presenting and publishing research findings internationally to advance knowledge in transportation systems and logistics.

Circular Economy for Sustainable Infrastructure



Dr.-Ing Ali Bawono

Dr.-Ing. Ali Bawono, PMP, is an esteemed sustainable urban transport and infrastructure specialist with a doctoral degree and 15 years of experience. His expertise includes project and program management, technical and policy analysis, business models, and capacity building. Dr. Ali excels in stakeholder communication, team leadership, and achieving shared objectives across diverse backgrounds.



About

Nestled at the hottest spot for technology in Southeast Asia, TUM Asia brings together the best of German engineering from TUM immersed in Asian culture to provide students with the twin perspectives from the East and the West. Many of TUM Asia's graduate students who have stepped foot in Singapore and has since broadened their horizons from the numerous multifaceted advancements that truly pushes the frontiers of technology. Take time to explore this amazing island with your classmates who come from various corners of the world and discover the real side of Singapore.

Information Period

27 - 31 May 2024 Monday - Friday

> **Fees** S\$1,100*

To Register

bit.ly/president-uni-oip-sq





terms and conditions apply*

