

SIT Launches Applied Artificial Intelligence and Digital Supply Chain Programmes

Commencing in September 2022, the two new BSc degrees aim to nurture specialised talents proficient in leading technological transformation

1 04 February 2022



The Singapore Institute of Technology is launching two new programmes for Academic Year 2022 — the Bachelor of Science with Honours in Applied Artificial Intelligence (AAI) and the Bachelor of Science with Honours in Digital Supply Chain (DSC).

Both programmes are three-year direct honours programmes with an initial intake of 40 students each.

The AAI programme aims to provide a strong talent pipeline of AI engineers proficient in developing, deploying and maintaining AI systems across multiple industry sectors through core training in software engineering, machine learning and professional skills. As part of SIT's unique applied learning pedagogy, students will also be exposed to industry projects staged across various domains, such as fintech, engineering and healthcare.

By intentionally building real-world projects into the programme curriculum, students are trained to be agile, and to be able to implement AI within a wide range of industry settings. The AAI programme is welcomed by partners such as Amazon Web Services, and has received endorsement from the national AI programme, AI Singapore.

The DSC programme, meanwhile, focuses on emerging technologies in the digital transformation of the logistics and supply chain sector. According to a report by the Ministry of Manpower in October 2020, higher value-job roles such as Logistics System Engineer, Supply Chain Analyst, and Automation Specialist are increasingly in demand to meet the logistics sector's evolving operating models and business needs.

The interdisciplinary programme aims to equip students with knowledge and skills in domains that would support the transformation of the supply chain and logistics sector. It places a strong emphasis on the development of capabilities and the adoption of emerging technologies required in industry digital transformation efforts.

Notable Industry Partnerships Established in Support of New Programme

With the launch of the DSC programme, SIT has also established partnerships with key industry partners Singapore Logistics Association (SLA), YCH Group (YCH) and Y3 Technologies (Y3) through two separate Memoranda of Understanding (MOU). Aimed at enhancing the programme's unique offerings, the partnerships will allow the parties to co-develop and co-deliver the content of the curriculum.



Left photo: Mr Oh Bee Lock, CEO, SLA (left), and Prof John Thong, Deputy President (Academic) & Provost, SIT (right) Right photo: From left: Ms Annie Lam, Head, Group Human Resources, YCH Group; Prof John Thong, Deputy President (Academic) & Provost, SIT; and Mr Philip Low, CEO, Y3 Technologies.

Students will gain work attachment, capstone project collaboration and networking opportunities with SLA's pool of more than 600 members, leading regional supply chain management provider YCH, and premier supply chain technology solutions provider Y3 Technologies. SIT students and faculty members can also look forward to participating in innovative applied research to deliver integrated solutions for the logistics community. In addition, SIT and its industry partners will co-create training programmes to support workplace learning and upskilling opportunities through customised training programmes.

Re-designed Bachelor of Engineering with Honours in Naval Architecture and Marine Engineering

Additionally, the new Academic Year will see the joint Marine Engineering, Naval Architecture and Offshore Engineering programmes offered by SIT and Newcastle University re-designed as a three-year Bachelor of Engineering with Honours in Naval Architecture and Marine Engineering (NAME) programme. The programme aims at equipping students with the expertise and skills to drive maritime digitalisation, decarbonisation, offshore renewables, and sustainable design and engineering of the global marine and offshore industry. Three corresponding specialisations in naval architecture, marine engineering and offshore engineering will be offered in the upper years of the degree programme.

To read the full story, please go to SIT's Digital Newsroom: https://www.singaporetech.edu.sg/digitalnewsroom/sit-launches-applied-artificial-intelligence-and-digital-supply-chain-programmes-to-nurture-talents-in-technological-transformation/

Dr Chua Thian Poh Makes Possible New Donation for Future Campus in Punggol

The gift also enables SIT to establish a permanent bursary fund in support of financially disadvantaged undergraduate students

04 February 2022

Dr Chua Thian Poh has made possible a new endowed gift of S\$2.6 million to the Singapore Institute of Technology (SIT) – in support of the development of its future campus in Punggol, as well as the establishment of the Chua Thian Poh Bursary to nurture financially disadvantaged undergraduates at SIT.

In recognition of this generous gift, the Discovery Hub at SIT's future campus in Punggol will be named the **Chua Thian Poh Discovery Hub.** In the interim, before the Punggol Campus is operational, the Student Activities Centre at SIT's current campus in Dover will be named the **Chua Thian Poh Student Activities Centre**.

The naming ceremony for the Chua Thian Poh Discovery Hub took place on 26 January 2022 at SIT@Dover, attended by Mr Chan Chun Sing, Minister for Education, who was the Guest of Honour, as well as Dr Chua Thian Poh, Executive Chairman of Ho Bee Land and Mr Nicholas Chua, Chief Executive Officer of Ho Bee Land and Board Chairman of Chua Foundation.

The Chua Thian Poh Discovery Hub is designed to cater to students working on project assignments in teams and as individuals and for their presentations. It is envisioned to be a space that actively engages the students as co-creators, planners, and managers in their academic and research project work.

This gift from Dr Chua Thian Poh through the Chua Foundation, will also support the establishment of the **Chua Thian Poh Bursary** – thus enabling SIT to award six bursaries (valued at \$5,000 each) each year and in perpetuity. The Chua Thian Poh Bursary is applicable to Singaporean and Singapore Permanent Resident undergraduates at SIT who have a monthly household per capita income of no more than S\$1,500.

The Chua Foundation was set up and funded by Dr Chua and his siblings to continue the legacy of their late mother, Madam Seah Sar, and to remember the values she stood for. Madam Seah always emphasised the importance of education, despite having little education herself and was very keen to help those in need. Following her example in nurturing the next generation and aiding the underprivileged, the Chua Thian Poh Bursary seeks to give SIT students the confidence to reach their true potential.

In both his private and public capacities, Dr Chua Thian Poh's support for SIT and its students has been transformative. His friendship with SIT began in 2012, when he made possible the SIT-Chua Thian Poh Scholarship in support of a student whose father had died in a car accident. In 2019, in his capacity as Chairman and CEO of Ho Bee Land, Dr Chua made possible an endowed donation amounting to \$3.25 million. It was the first donation that SIT had received for its future campus in Punggol, as well as a scholarship for academically promising undergraduates at SIT. The Ho Bee Auditorium and the Ho Bee Scholarship at SIT were named in recognition of this gift.

Said Prof Chua Kee Chaing, President of SIT, "As a young university that is about to embark on a new era of growth in its own new campus, SIT is very grateful for Dr Chua Thian Poh's firm friendship, which goes back to 2012. SIT and its students are deeply appreciative of Dr Chua's philanthropic leadership and firm support. On behalf of SIT, I wish to express our utmost thanks for his generous new gift to support our future campus, as well as to encourage learning and discovery."

"I am very pleased to be able to nurture the students at SIT, who are set to become future professionals to drive Singapore's economy," said Dr Chua Thian Poh, adding, "SIT has a very thoughtful approach to nurturing pragmatic and innovative 'thinking tinkerers' who are also passionate about serving the community. I hope the students will be well supported by the Chua Thian Poh Discovery Hub and Bursary on their learning journey."



From left: Prof Tan Thiam Soon, Institute Professor, SIT; Mr Ng Yat Chung, Chairman, SIT Board of Trustees, and Chief Executive Officer, Singapore Press Holdings Ltd; Mr Chan Chun Sing, Minister for Education; Mr Nicholas Chua, Chief Executive Officer, Ho Bee Land, and Board Chairman, Chua Foundation; Dr Chua Thian Poh, Executive Chairman, Ho Bee Land; and Prof Chua Kee Chaing, President, SIT.

SIT and Siemens Announce New Degree Specialisation in Engineering at Opening of Applied Learning Conference 2022

The new degree specialisation in the Robotics Systems Programme will enable companies to build Industry 4.0 capabilities

04 February 2022



The signing ceremony between SIT and Siemens was attended by key representatives (from left): Mr Sascha Maennl, Senior Director, Factory Automation Sales Asia-Pacific, Siemens; Dr Thai Lai Pham, President & CEO, Siemens Pte Ltd; Prof Chua Kee Chaing, President, SIT; and Mr Bernard Nee, Vice President (Industry & Community Group), SIT.

The Singapore Institute of Technology (SIT) and Siemens Pte Ltd have signed a Memorandum of Understanding (MOU) to develop a new degree specialisation in the Robotics Systems programme. The degree specialisation will deepen graduates' knowledge and skills in Industry 4.0 technologies for the advanced manufacturing sector, such as robotics and artificial intelligence (AI). Demand for these skill sets is growing, due to the rapid rise in robotics, machine learning and the Internet of Things.

The partnership was announced at the opening of the third Applied Learning Conference (ALC), held from 20 January to 21 January 2022. Themed 'Embracing Change in an Era of Disruption', the virtual conference explored the role of higher education in connecting graduate competencies to workforce needs and strengthening interdisciplinary learning to cope with future uncertainties. Topics included competency-based education, interdisciplinary learning, applied learning pedagogies, workplace learning, and the lessons and impact of the COVID-19 pandemic on education.

The ALC is organised by SIT as one of its key platforms to discuss and share best practices in academia-industry collaboration in applied learning and talent development. Ms Gan Siow Huang, Minister of State, Ministry of Education, is the Guest-of-Honour in this year's ALC.

New Degree Specialisation to Boost Industry 4.0 Capabilities

Commencing in Academic Year (AY) 2023/24, the new degree specialisation will equip students with work-relevant skills, such as robotics systems development, systems engineering, AI, and project management. SIT and Siemens will work together to onboard ecosystem partners, as well as co-develop the curriculum, recruitment strategies and assessment frameworks.

This partnership will also create a new pathway to allow students to jumpstart their careers while concurrently pursuing a university degree. Students will alternate between spending one to two trimesters in SIT and at the workplace under a 'term-in, term-out' model, and acquire work-related skills that augment their classroom learning. SIT and Siemens will also jointly explore developing workplace learning initiatives and rapid prototyping projects for like-minded companies in the advanced manufacturing ecosystem.

Professor Chua Kee Chaing, President, SIT, said, "As Singapore's university of applied learning, we place both industry and the individuals at the heart of SIT. We are constantly innovating in the delivery of university education, developing new pathways that blur the boundaries between study and work. We are very happy to be partnering Siemens in the development of this new degree specialisation.

With Siemens' expertise in developing advanced engineering technologies and SIT's strengths in applied learning and research, I am confident that the degree specialisation will further enhance the industry relevance of our education and the career-readiness of our graduates."

Dr Thai-Lai Pham, President and CEO, Siemens Pte Ltd, said, "Siemens believes that providing innovative and future-oriented education and training opportunities is key to the sustainability of our company. So we proactively address skill and qualification requirements, and work with universities around the world on this topic." He added, "I am pleased to partner with SIT in Singapore to develop a programme based on Germany's successful dual education model. I am confident that this model will help to train relevant talents with both theoretical and practical expertise."

More information on the ALC 2022 programme, speakers, and synopsis of talks can be found at: https://www.alc.sg/

To read the full story, please go to SIT's Digital Newsroom: https://www.singaporetech.edu.sg/digitalnewsroom/sit-and-siemens-announce-new-degree-specialisation-in-engineering-at-opening-of-applied-learning-conference-2022/

Over \$1 Million Raised to Establish the Sang Nila Utama Scholarship at SIT

New endowed scholarship aims to nurture first movers who will drive growth areas of the economy

04 February 2022



From left: Prof Tan Thiam Soon, Institute Professor, SIT, Ms Tan Ci En, Anne, SITizen Ambassador, Mr Edy Hardijana Tjugito, Director, Borden Eagle Singapore Pte Ltd, Mr Ahmad Syafiq, Sang Nila Utama Scholar, Prof Chua Kee Chaing, President, SIT, Mr Adley Michael Pereira, Sang Nila Utama Scholar, Mr Bahren Shaari, CEO, Bank of Singapore, Prof Yaacob Ibrahim, Advisor, Office of the President, SIT, Ms Divya Patel, COO, Ishk Tolaram Foundation.

A new scholarship named after the 13th-century Palembang prince who according to tradition founded the Kingdom of Singapura has been established at the Singapore Institute of Technology (SIT). At least two students at SIT will be supported annually by the Sang Nila Utama Scholarship, which is valued at \$15,000 each.

The scholarship has been made possible by a group of five individual and corporate donors thus far, whose generous giving (together with the Enhanced Government Matching Grants that their gifts have attracted) have resulted in an endowed fund of more than \$1 million that will support this scholarship in perpetuity.

The Sang Nila Utama Scholarship at SIT is open to undergraduates who are pursuing a full-time degree in Engineering, Infocomm Technology and the Health and Social Sciences, who have achieved outstanding academic results and have made contributions beyond academic studies to their university or the community.



Mr Adley Michael Pereira (left) and Mr Ahmad Syafiq (right) sharing their stories about how the Scholarship has impacted their lives. The inaugural recipients of the Scholarship met with some of the donors of the Sang Nila Utama Scholarship at an appreciation ceremony on 5 January 2022.

Mr Adley Michael Pereira, one of the first two recipients to be awarded the Sang Nila Utama Scholarship, is a final-year Mechanical Engineering student who is currently doing his Integrated Work Study Programme (IWSP) at Lumileds as a Process Integration Engineer. "I feel very honoured to have been selected for this scholarship, and grateful as well," he said. "It has allowed me to replace my seven-year-old computer for a new one to create 3D drawings, CAD drawings and fluid simulations in my studies."

He has already taken the step to contribute back to the community through Magical Hearts, his co-curricular activity at SIT that organises community outreach programmes with Aphasia SG, among other organisations, to perform and teach magic tricks to beneficiaries to help them communicate. Aphasia is an acquired communication disorder that occurs after parts of the brain controlling language are damaged, for example after a stroke. "I hope to hone my leadership skills and grow to become the kind of leader who can understand the issues my peers face and help them through it," he said.

Said Mr Bahren Shaari, CEO of Bank of Singapore, who has been championing the fundraising initiative, "The intent is to make possible a scholarship that will nurture budding professionals who will be first movers in the community as well as the growth areas of the industry."

"The gift of education is the best gift that we can give someone. I believe that there is a need for us to champion equal opportunity, and especially to create opportunities for young people to realise their aspirations. I am pleased to be able to help," he added.

Said Professor Chua Kee Chaing, President, SIT, "On behalf of SIT, I wish to thank all the donors who have supported the Sang Nila Utama Scholarship. We are very grateful for their inspiring philanthropic leadership to nurture the values of initiative, dynamism, and service. We very much look forward to seeing more donors joining them in supporting this scholarship."



Prof Chua Kee Chaing, President, SIT, (right) presents Mr Bahren Shaari, CEO, Bank of Singapore, (left) with a framed Tembusu leaf as a token of appreciation. The Tembusu Tree is native to Singapore and is also a featured symbol of Singapore's five-dollar note.

^{*}This event was held in accordance with existing safe management measures as of January 2022.

Advancing Ageing Research in Singapore

Can habitual moderate to heavy housework help older persons maintain better mental and physical function? The answer is 'yes', according to a recent study by Associate Professor Wee Shiou Liang

04 February 2022



Assoc Prof Wee with the machines used in the Gym Tonic exercise programme.

Over the last decade, Assoc Prof Wee has been working with community partners to develop strategies and evaluate interventions to extend the health span of older persons, and better enable ageing in place. An example is working with health technology company, PulseSync to study the effectiveness of the Gym Tonic (GT) pneumatic machine resistance training programme for older persons.

Helping Older Persons Maintain Strength and Function

GT was initiated by the Lien Foundation in 2014, and PulseSync undertook the task of operationalising GT at community clubs and senior care centres. A research team led by Assoc Prof Wee evaluated the impact of GT using a pragmatic, randomised-controlled trial design from 2018 to 2019.

Findings from the research were published in the <u>European Review of Aging and Physical Activity</u>. It found that seniors who participated in the exercise programme twice a week, over the course of three months, showed improved muscle strength and gait speed – demonstrating the effectiveness of the GT programme.

Assof Prof Wee said, "From my other community-based research, multi-modal (physical and cognitive) functional training and activities can complement GT to achieve better functional performance for older adults in power, balance, endurance, and mental tasks relevant to maintaining an independent lifestyle.

Breakthroughs on Ageing Research

Research on ageing, health and social services, and care integration must be multi- and trans-disciplinary with quick real-world industry and community applications and translations. Assoc Prof Wee feels that SIT's established networks with industry and community facilitate the sharing of resources and multi-level collaborations required to advance and translate ageing research.

"Not only does SIT HSS work closely with allied health, nursing, social sciences, we also collaborate with other SIT academic clusters. We place strong emphasis on applied learning and research, making us well-placed to connect resources and advance research for heathy ageing," he said. In addition, he believes such collaborations are key to accelerating research translation.

About Singapore's Approach to Ageing and Long-term Care

Further, Singapore focuses on three broad areas with regards to ageing: extending health span; ageing in place; and advancing care model.

The World Health Organisation (WHO) defines healthy ageing as 'a process of developing and maintaining the functional ability that enables well-being in older age'. This approach points towards optimising capacity together with cultivating an empowering environment for ageing in place. Therefore, nursing homes in Singapore need to evolve from functioning primarily as medical institutions to residential homes.

A large proportion of nursing home residents are persons with dementia. Assoc Prof Wee emphasised that we can view dementia as a shift in the way an individual experiences the environment. "Functional decline just means one's life is not what it used to be, so one must gradually accept a 'new normal'," he said.

To read the full story, please go to SIT's Digital Newsroom: https://www.singaporetech.edu.sg/digitalnewsroom/advancing-ageing-research-in-singapore/

Flowers Forever

SITizens enjoy flexing their creativity with flowers to create a Botanical Luxe Resin Dish at a workshop organised by the SIT Alumni Leisure Network

1 04 February 2022



Following the popularity of previous resin workshops — Resin Cheeseboard Workshop, Resin Marbled Coaster Workshop and Holiday

Resin Ornaments Workshop — the SIT Alumni Leisure Network brought back craft studio Room to Imagine to lead the Botanical Luxe

Resin Dish Workshop for SITizens to enjoy.

Over the span of two hours on a weekday night, close to 50 participants came together to create a customised dish by encasing pressed flowers and leaves in resin. They were each provided with a porcelain dish and a variety of premium flowers and leaves to lay out in their preferred design.

Physiotherapy alumnus Ms Rebecca Fam was thrilled to explore a new type of resin art. "I've been to the previous Holiday Ornaments Workshop, but I was pretty excited to attend this as it involves a new medium," she said.



Clockwise from right: Arrange the flowers in your desired design on the dish provided; pour the resin solution over the flowers; torch out air bubbles; add glitter glass for additional flair!

Ms Chen Zhengxiang, a Diagnostic Radiography alumnus, gave the workshop two thumbs up. "The workshop was easy to follow along as the instructor gave clear instructions. I'll use my dish either for decorative purposes or to hold small items like rings or bracelets," she said.

Ms Chan Jia Ting, a Chemical Engineering alumnus, felt it was a great way to destress after work. "I love all sorts of DIY workshops," she said. "It was challenging to keep the leaves and flower petals down within the resin, but I enjoyed admiring my artwork once it's done," she added.



Happy participants after a night of making art.

In Appreciation of Your Mentoring

Mentors and mentees of the Alumni Mentoring Programme finally meet in person to conclude Cycle 1 & 2 of the programme and enjoy a movie together

1 04 February 2022



Time to enjoy a movie at Projector X!

After months of only being able to communicate virtually, mentors and mentees from the first two cycles of the SIT Alumni Mentoring Programme finally met in person at the Cycle 1 & 2 Appreciation Ceremony on Sunday, 16 January 2022.

This was the programme's first physical event since April 2021, held over two sessions in the morning and afternoon at Projector X: Riverside. The participants seized the chance to gather (in groups of five) and have a proper face-to-face catchup, with some from the morning session even staying till the afternoon to keep the conversation going. The participants were also presented with certificates of appreciation to commemorate their completion of the programme.



Mentors and mentees finally enjoy meeting face-to-face after a long time.

After their catchup session, the participants then gathered to listen to a brief sharing by mentors and mentees about their programme experience so far, as well as enjoy a movie screening of Good Will Hunting, which showcases themes about good mentorship. In addition, the mentors received a pleasant surprise – personal videos of thanks that their mentees had prepared for them.

Mr Tan Wei Liang, who has been a mentor since Cycle 1 to Cycle 3, shared that he still finds himself learning from his juniors and the different perspectives that they bring to the table. "We all change in life and I think between seniors and juniors, we can help each other mature multi-dimensionally," he said. "As a mentor, I am providing life advice, career advice, and how you can cope as you progress in life. That's how I hope my mentees have benefited through the programme." He also encouraged students who are graduating soon to consider becoming mentors themselves.

Mr Oak Soe Paing, a mentee who recently graduated from the Electrical Engineering & IT degree programme, intends to do just that. "My mentor has made my transition from student to working adult a smoother journey, and I hope to pay that forward," he said. "I find that one of the greatest satisfaction is being able to inspire someone, and having them come back to tell me that I have made a difference in their life."



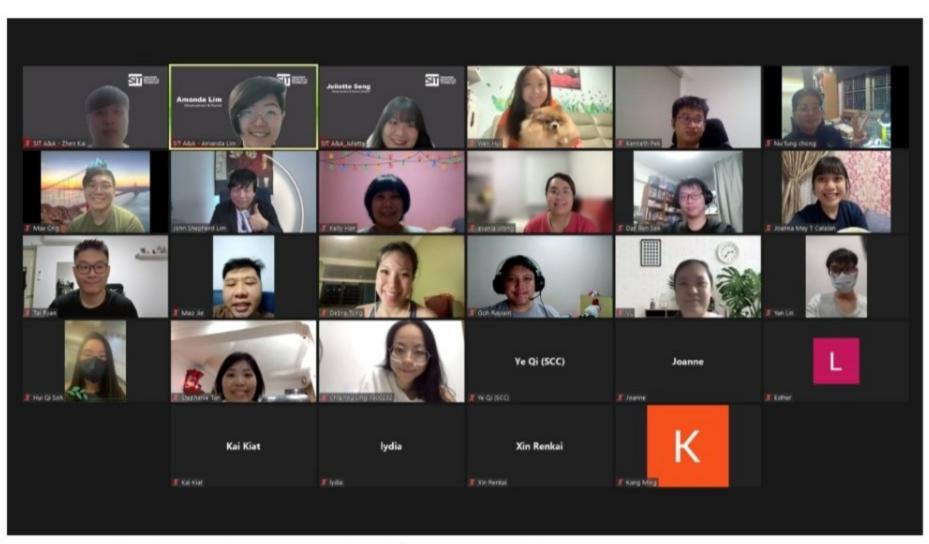
Mr Tan Wei Liang, Mentor (left) and Mr Oak Soe Paing, Mentee (right), share their personal experiences as participants of the Alumni Mentoring Programme.

^{*}This event was executed in accordance with existing safe management measures as of January 2022.

Taking Stock of Your Mental Health in the New Normal

Alumni learn how to address mental health issues that may arise due to the COVID-19 pandemic, in a webinar organised by the SIT Alumni Career Network

04 February 2022



Participants at the Mental Wellness in the New Normal - Self-Care 101 and Improving Workplace Communication.

"Anxious, uncertain of the future", "tired", "burned out" – these are some of the emotions that SITizens said they felt due to the COVID-19 situation. On Thursday, 13 January 2022, SITizens gathered at a webinar on Mental Wellness in the New Normal – Self-Care 101 and Improving Workplace Communication, led by Dr. John Shepherd Lim, Chief Wellbeing Officer at the Singapore Counselling Centre.

He emphasised the importance of communicating personal needs and prioritising self-care. After all, "Our mental health is our greatest asset," he said. Other topics covered by the webinar included advice on how to address poorer work-life balance, increased miscommunication and Zoom fatigue.

Computing Science alumnus Mr Chua Mao Jie recalled similar advice he had received from a former psychology lecturer. "The webinar reminded me to practice mindfulness. I am also certain these tips will be useful if I hold a leadership position in my future career and support future generations of the workforce," he said.

Ms Debra Tong, who graduated from the Hospitality Management programme, enjoyed the session as it reminded her to switch up her routine. "Working from home or adjusting to COVID-19 measures can be draining. The webinar was a good reminder to take care of myself, especially when I get too busy and forget to do so," she said.

Participants also asked questions on finding the right counsellor or therapist to suit their needs, how to deal with office gossip, and concerns about mental illness.



Dr Lim covers several topics related to worry and anxiety due to the pandemic.