ANNUAL REPORT /2022

SINGAPORE'S UNIVERSITY OF APPLIED LEARNING

ABOUT THE COVER

As Singapore's University of Applied Learning, SIT plays an integral role in bridging academia and industry. This is possible because of our close ties with individuals, namely, students, alumni, and staff; as well as with industry partners with whom we co-create innovations and co-develop talent pipelines. These relationships make learning seamless for our students, whether they are working professionals or fresh out of school.

This year's Annual Report is centred around the theme 'Individuals and Industry at the Heart of SIT', which encapsulates the importance of strengthening our ties with individuals, and our links with the industry and community to fulfil the mission of the University.

The cover features SIT graduate Yu Pengfei, who benefitted from the University's applied learning pedagogy, allowing him to be well-prepared for the cybersecurity industry.

WE ARE SIT

The Singapore Institute of Technology (SIT) is Singapore's University of Applied Learning. Our mission is to maximise the potential of our learners and innovate with industry through an integrated applied learning and research approach, so as to contribute to society and the economy.

CONTENTS

From top (L–R): SIT@RP Building, SIT@NP Building, SIT@TP Building, SIT@SP Building, SIT@NYP Building, SIT@Dover

SIT AT A GLANCE

6 Campuses

SIT@RP BUILDING
SIT@NYP BUILDING
SIT@TP BUILDING

SIT@NP BUILDING
SIT@SP BUILDING
SIT@DOVER

5 Academic Clusters

ENGINEERING

15 undergraduate programmes[1]

4 postgraduate programmes by coursework

2 postgraduate programmes by research

HEALTH AND SOCIAL SCIENCES

6 undergraduate programmes

2 postgraduate programmes by research

BUSINESS, COMMUNICATION AND DESIGN

6 undergraduate programmes

FOOD, CHEMICAL AND BIOTECHNOLOGY

4 undergraduate programmes

1 postgraduate programme by coursework

INFOCOMM TECHNOLOGY

8 undergraduate programmes[1]

Undergraduate and Postgraduate Programmes

17 SIT-conferred Undergraduate Programmes

17 SIT-OU Joint Undergraduate Programmes

4 Overseas University Undergraduate Programmes

POSTGRADUATE PROGRAMMES

▷▷ **5** by coursework

▷▷ **4** by research

[1] BEng (Hons) Computer Engineering degree programme is included in both Engineering and Infocomm Technology clusters.

8 Overseas University Partners

DIGIPEN INSTITUTE OF TECHNOLOGY

MASSEY UNIVERSITY

NEWCASTLE UNIVERSITY

TECHNICAL UNIVERSITY OF MUNICH

THE CULINARY INSTITUTE OF AMERICA

TRINITY COLLEGE DUBLIN

UNIVERSITY OF GLASGOW

UNIVERSITY OF LIVERPOOL

Graduate Employment Survey 2020

95% Overall Employment

$3,675 Mean Salary

CHAIRMAN'S MESSAGE

Financial year (FY) 2021 marked a passing of the baton for the SIT leadership – with the appointment of Professor Chua Kee Chaing as the third President of SIT, succeeding Professor Tan Thiam Soon. The SIT Board of Trustees also saw some changes in its composition, with the appointment of four new trustees who hailed from different sectors and backgrounds. As I take over the reins from Mr Ng Yat Chung, I would like to thank him for his sterling leadership as SIT Chairman over the last 12 years, and Prof Tan for his significant contributions during his term as SIT President.

It is indeed an opportune time for the new leadership to review and chart SIT's direction into the next phase of growth. It is important for the University to continue to redefine the higher education landscape by deepening applied learning and research, while continuing to forge strategic partnerships focused on 'win-win-win' outcomes for our students, industry, and community.

INDIVIDUALS AT THE HEART OF SIT

At the heart of every university are the learners. They have chosen SIT to enhance their learning across the University's wide range of pre-employment training (PET) and continuing education and training (CET) programmes. I am pleased to note that SIT's undergraduate student enrolment has been growing year-on-year. SIT now has an annual intake of close to 3,000 PET students and an enrolment of over 8,500 undergraduates – making it the third largest autonomous university in Singapore by intake.

Putting individuals at the heart of everything we do means adopting a learner-first approach, and making sure our curriculum is kept up to date with industry demands.

With collaboration and connectivity across disciplines driving productivity gains in various sectors, we continue to refine our curriculum, and look at **harmonising our programmes** to ensure that they continue to remain relevant amidst the ever-changing needs of industry. The push towards **interdisciplinary learning** is going to be key as we navigate all manner of challenges coming our way. In addition, SIT has introduced **transferable skills** elements into its curriculum. This is to ensure that our graduates have the agility and preparedness that come from the exposure to adjacent knowledge, as well as a solid grounding in transferable skills to navigate multiple careers in an uncertain future.

SIT strives to create as many opportunities as possible for our students to be immersed in the workplace during their course of study as it is one of the most authentic learning environments to train work-ready professionals.

Other than our signature **Integrated Work Study Programme (IWSP)**, I believe our workplace learning approach will greatly benefit the education of our students. For example, for the **Term-In/Term-Out (TITO)** mode of our degree programmes, the studying and work done during Term-Out is designed in collaboration with our partner companies and is credit bearing. By working closely with our industry partners, we can better ensure that our students are equipped with the skills that are in great demand. This demand-based approach will be a powerful differentiator for us as a university of applied learning.

> " SIT strives to create as many opportunities as possible for our students to be immersed in the workplace during their course of study as it is one of the most authentic learning environments to train work-ready professionals. "

In addition, another important differentiator is to recognise the prior learning and industry experience of our adult learners. Our two pilot programmes for the **Competency-Based Workplace Learning (CBWL)** pathway have kickstarted this. The aim is to address industry skills gaps and provide an inclusive alternative pathway for in-employment learners to upskill and pursue a degree. The new pathway provides adult learners, regardless of their starting qualifications, a means to enhance their skills and pursue a degree while working – the first of its kind in Singapore.

With our continued emphasis on the work-learn continuum and competency-based learning, SIT aims to lead and shape the continual education and training programmes that are relevant to the industries' needs.

INDUSTRY AT THE HEART OF SIT

Another important piece of what makes SIT unique is our extensive collaborations with industry, which are weaved into all aspects of our applied learning and research activities. The IWSP, TITO mode, and CBWL pathway would not be possible without the strong backing of our industry partners.

I am heartened that we continued to grow our network of industry partners in FY2021, with numerous MOUs being signed and research collaborations being forged in many areas. The intent is to work hand-in-hand with companies and move them up the innovation value chain.

To that end, we have established an **integrated end-to-end innovation infrastructure** to help industry with their innovation journey. This is supported by various Applied Research Centres (ARCs), including the Future Communications Translation Lab (FCTLab), Energy Efficiency Technology Centre (EETC), Construction Technology Innovation Lab (CTIL), Centre for Infrastructure and Tunnel Engineering (CITE), and FoodPlant, as well as Innovation Centres such as Design Factory@SIT, Rapid Product Innovation and Development (RaPID) Centre, and SIT-Poly Innovation Centre of Excellence (SPICE).

With these centres, companies will be able to innovate, ideate, prototype, and validate products, whilst working closely with SIT faculty and students.

On the applied research front, we continued to make progress as well. SIT pursues applied research to help drive industry innovation, and at the same time, provide authentic learning experiences for our students. For example, by participating in translational research programmes that bridge knowledge discovery and application, our students will be able to contribute to solutions in sustainability, digitalisation, food security, and community healthcare.

To this end, SIT has set up several translational research programmes with the intent to grow these into areas of excellence, which will be recognised by industry as SIT's strengths. In FY2021, Sustainable Maritime Engineering was added to our suite of **Strategic Translational Research Programmes** to develop and test-bed sustainable maritime technologies and solutions. During the year, we also received our first two MOE Tier 2 grant wins, as well as our first Industry Alignment Fund Pre-Positioning Programme (IAF-PP) grant.

In the near future, we look forward to leveraging the living lab to propel our applied research efforts. With the additional investment from SP Group to enhance the capabilities of the Multi-Energy Microgrid (MEMG) at our future Punggol campus, we are moving one step closer to realising a unified smart energy network to support applied learning, research, and experimentation in a real-world environment.

From the perspective of an industry partner, we provide an 'as-real-as-the-market-gets' environment to stress-test their ideas and an opportunity to leapfrog and gain a competitive advantage. For the students, this is authentic learning. Lessons and experiments can be carried out in a real-world environment and tested in real-time. This gives students a front-row seat to experience what the future would be like.

While we empower and enable our learners with an industry-oriented education experience, we would also like to imbue in our learners a passion to serve and contribute to the society while at SIT. As we make preparations for our move to our new home in Punggol, we continue to engage with the wider Punggol community and are mindful of how SIT is uniquely poised to help shape the destiny of the upcoming Punggol Digital District. As restrictions eased over the last half of the year, our students gave out care packs to the workers who were stationed at the building sites, and in March this year, 10 SIT students and 18 migrant workers at the ASPRI-Westlite Papan dormitory engaged in a spirited game of dodgeball.

This creative sports engagement was just one of several events that SITintegrates – a student-led group focusing on community integration – has organised for migrant workers in Singapore since 2021. The aim: to integrate these workers into the community by creating a sense of belonging.

Moving forward, SIT will endeavour to engage with schools, government agencies, and interest groups in Punggol, as well as beyond, to ensure that our SITizens remain grounded in the community and serve in our society.

THE ROAD AHEAD

With individuals and industry firmly at the heart of SIT, we will continue to forge wide-ranging partnerships with industry in areas such as workplace learning, work-study degrees, IWSP, and applied research. Each partnership is unique, but they all contribute towards realising SIT's education and research missions. In terms of community building, we will strive to maintain the strong 'kampung spirit' that is evident in Punggol.

I am confident that with the support of our strategic partners – the Ministry of Education, polytechnics, overseas university partners, industry partners, government agencies, and community leaders – coupled with a unified 'whole of SIT' approach, we will continue to fly the flag high as Singapore's premier University of Applied Learning.

MR BILL CHANG
Chairman

PRESIDENT'S MESSAGE

Financial Year (FY) 2021 was a fruitful year for SIT despite the pandemic. We welcomed a record intake of 2,952 new SITizens for the academic year from a pool of 13,000 applicants, an 8% growth in applicants from the previous year. The academic quality of admitted polytechnic students improved; and close to 86%, a year-on-year increase of 3%, were admitted to their first choice of degree programmes.

We celebrated the achievements of our graduating classes of 2020 and 2021 with physical graduation ceremonies in February and October 2021, respectively, to the delight of both SITizens and their families. For the Class of 2021, more than 2,000 graduates from 46 undergraduate and postgraduate programmes received their degree scrolls, including the pioneer cohorts from the BEng in Aircraft Systems Engineering and the MSc in Chemical Engineering programmes.

In the 2020 Graduate Employment Survey, 95% of our graduates secured a job within six months of graduation. This was higher than the 91% overall employment figure from the previous year.

Beyond employment outcomes, our SITizens continue to make us proud. For example, one SITizen's design of a compact recycling container was selected by the National Environment Agency to be mass produced for distribution to all households in Singapore. Another SITizen drew the attention of NASA with his space illustrations and was commissioned to work on a year-long project with NASA's public outreach department.

In many ways, FY2021 was also the start of a new phase of development for the University. Through a well-executed succession planning exercise, I assumed the mantle of President, taking over from Prof Tan Thiam Soon. During his nine-year term, Thiam Soon was instrumental in getting approval and funding for SIT's integrated campus in Punggol that is currently under development. He also successfully grew a new university into the third largest in terms of undergraduate student intake amongst the six autonomous universities in Singapore, and one that is well recognised by industry. SIT owes Thiam Soon a debt of gratitude for his stewardship and sterling service.

In March 2022, we welcomed our new Chairman, Mr Bill Chang, Group Enterprise CEO and Singapore Country Chief Officer of Singapore Telecommunications Limited or Singtel. Bill took over the reins from Mr Ng Yat Chung, who was SIT's founding Chairman. During his 12 years as Chairman, Yat Chung oversaw SIT's establishment as a publicly-funded institute of higher learning in 2009 and its elevation in 2014 as Singapore's fifth autonomous university. We are deeply grateful to Yat Chung for his vision, guidance, and support in the development of the University.

UPDATED MISSION STATEMENT

To take SIT into its next phase of growth, we sharpened our mission statement to reflect the dual role of the University in developing talent for industry and supporting them in their innovation journeys. Our updated mission statement is:

"To maximise the potential of our learners and to innovate with industry, through an integrated applied learning and research approach, so as to contribute to the economy and society."

The updated mission statement emphasises SIT's focus on bridging and strengthening the links between the *individuals*, for which the University aims to nurture, especially our students, alumni and staff; and the *industry* that we partner with to co-create innovations and/or co-develop their talent pipeline. This emphasis forms the theme of this annual report – '*Individuals and Industry at the Heart of SIT*'.

DEEPENING APPLIED LEARNING

A major initiative during the year was the implementation of the Undergraduate Programme Structure (UPS) as part of the university-wide effort to harmonise our programmes. UPS formally incorporates interdisciplinary learning and transferable skills components into the curriculum, better preparing our students for the workplace. The goal is to meet the demands of the evolving work landscape by developing in our students the ability to take on multiple perspectives, and synthesise solutions to complex, multi-faceted problems. We piloted five programmes under UPS, benefitting 370 first-year students and more programmes will follow.

We expanded our offerings, both for our undergraduate programmes, as well as Continuing Education and Training (CET) programmes. The new undergraduate degree programmes developed for Academic Year (AY) 2022 include Applied Artificial Intelligence, Digital Supply Chain, and Applied Computing (Fintech specialisation). In the CET space, we continued to engage industry and implemented new hybrid and full-synchronous online courses, as well as professional certification examinations. One key initiative was the collaboration with the Professional Engineers Board to curate a series of CET and bridging courses aimed at capability development and enabling certifications of Professional Engineers. In 2021, despite COVID-19, SIT*LEARN* Professional Development delivered 84% more CET training places than the previous year.

PIONEERING WORKPLACE LEARNING

We took a major step to pioneer the work-learn continuum that SIT has been championing in recent times. To support our learners in new modalities of education, we have been piloting the Competency-Based Workplace Learning (CBWL) pathway with two programmes since September 2021. Each programme's curriculum was designed in collaboration with industry to enable workplace learning for programme participants. Since its launch, we have garnered positive feedback of the pathway from both workplace learners and their employers, and we continue to refine the programme with our industry partners.

Another work-learn modality we started in the year is the Term-In/Term-Out (TITO) model for our Applied Computing (Fintech specialisation) programme. Here, students alternate between spending one to two trimesters in SIT and at the workplace. At the workplace, they work on projects that are jointly curated and supervised by SIT and the company.

The intent is that even while working and contributing to the business of the company, the students will be acquiring new competencies and working towards the attainment of their degrees. Four companies have come on board to work with us on this programme.

GROWING APPLIED RESEARCH & INDUSTRY COLLABORATIONS

On the research front, we have made much progress as well. We embarked on some 40 applied research projects with a total funding of $40 million, involving 66 industry collaborators ranging from MNCs, SMEs, government agencies, and start-ups. These include a joint research programme with Agrocorp International to improve the extraction of proteins from plants to maximise protein quality, yield, and functionality, as well as to make the extraction process greener.

We officially opened FoodPlant, a small-batch food production shared facility, set up jointly with Enterprise Singapore and JTC. FoodPlant is a key part of SIT's sustainable food innovation programme that aims to help local companies grow and innovate through food technology. It also serves to strengthen SIT's education mission by providing our students an authentic learning environment that brings them closer to the industry.

The year also saw the setting up of the Centre for Infrastructure and Tunnel Engineering. A partnership with Land Transport Authority, this new centre aims to strengthen Singapore's tunnelling and infrastructure development capabilities.

Another key development is SP Group's increased investment of up to $8 million to enhance the capabilities of the Multi-Energy Microgrid (MEMG) at SIT's future Punggol campus. The MEMG will be the largest private microgrid in Singapore when it is completed in 2024, and the first to be constructed on a university campus in Southeast Asia.

SUPPORTING SITIZENS

Although the impact of the pandemic eased in FY2021, COVID-19 continued to affect some SITizens and their families financially. The University continued to draw on the Student Relief Fund @ SIT (COVID-19) to help SITizens who faced unexpected financial hardship caused by the pandemic. As of 31 March 2022, 1,283 SITizens have received help from the fund with a total disbursement of over $2.3 million.

As we embark on this next phase, and with the continued support of our stakeholders, I am confident that we will excel and make SIT a premier University of Applied Learning.

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PROFESSOR CHUA KEE CHAING
President
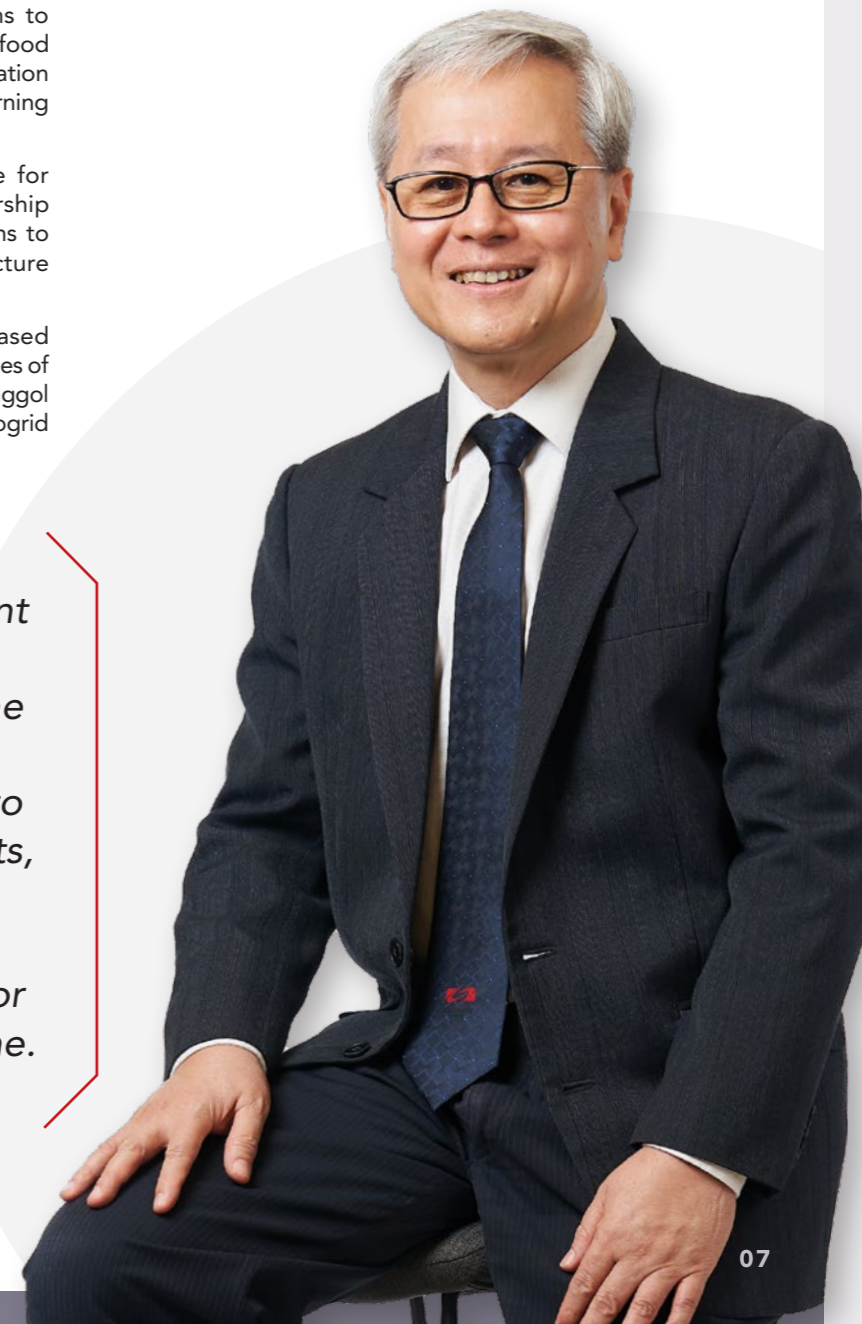
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> *The updated mission statement emphasises SIT's focus on bridging and strengthening the links between the individuals, for which the University aims to nurture, especially our students, alumni and staff; and the industry that we partner with to co-create innovations and/or co-develop their talent pipeline.*
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SENIOR MANAGEMENT

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2022

Professor Chua Kee Chaing

President

Appointed 1 Jan 2022

Professor John Thong

Deputy President (Academic) & Provost

Appointed 1 Jan 2022

Mr Ronnie Tay

Deputy President (Administration) & Chief Financial Officer

Appointed 1 Jul 2019

Mr Chan Wing Leong

Deputy President (Campus Development) & Chief Investment Officer

Appointed 1 Jul 2019

Mr Bernard Nee

Vice President (Industry & Community)

Appointed 1 Jan 2022

Associate Professor Susanna Leong

Vice President (Applied Research)

Appointed 1 Jan 2022

Associate Professor Ivan Lee

Vice President (Innovation)

Appointed 1 Oct 2015

Mr Tsoi Mun Heng

Vice President (Planning)

Appointed 1 Apr 2015

BOARD OF TRUSTEES

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2022*

*Includes trustees appointed after 31 March 2022. Information correct as at Aug 2022.

"It is important for me as a supervisor to support Jonathan's journey in pursuing a degree and his interest in lifelong learning. Through the CBWL pathway, he has shown much determination and resilience in pursuit of his personal and professional goals."

MR RODRICK YEO
Engineering Lead
Ensign InfoSecurity

A PATHWAY FOR INDUSTRY-CENTRIC LIFELONG LEARNING

Mr Jonathan Goh, 41, is pursuing his dream and upgrading himself with a Bachelor of Engineering with Honours in Information and Communications Technology (Information Security) through SIT's Competency-Based Workplace Learning (CBWL) pathway. This is a result of the collaboration between SIT and Ensign InfoSecurity, the largest, pure-play end-to-end cybersecurity service provider in Asia.

(From left) Mr Jonathan Goh, Manager, with mentor Mr Rodrick Yeo, Engineering Lead, both from Ensign InfoSecurity.

KEY HIGHLIGHTS

FY2021 was a year filled with a mix of virtual and physical events as Singapore made a transition towards the COVID-19 endemic phase.

2021

09 APRIL MOU WITH CHONGQING YUBEI DISTRICT PEOPLE'S GOVERNMENT AND WISENET ASIA PTE LTD

SIT signed an MOU with Chongqing Yubei District People's Government and Wisenet Asia Pte Ltd, which aims to provide human capital development of executives in Chongqing through post-graduate programmes and executive education. In addition, SIT students will have the opportunity to be placed in Overseas Integrated Work Study Programmes (OIWSP) with companies in Chongqing. This MOU builds on the Joint Implementation Committee for the China-Singapore (Chongqing) Demonstration Initiative on Strategic Connectivity, a government-to-government platform.

03 MAY PERMANENT SUPPORT FOR FOOD TECHNOLOGY APPLIED RESEARCH AND SCHOLARSHIPS AT SIT FROM PRIMA GROUP

SIT received an endowed gift of $3 million from the Prima Group to develop future talents and applied research in Food Technology. The gift, which commemorates Prima Group's diamond anniversary, has enabled SIT to establish the Prima Group Scholarship for talented Food Technology undergraduate students, as well as the Prima Group Applied Research Grant to run innovation projects that are focused on closing technological gaps in food manufacturing and processing.

21 JUNE PURSUITS BEYOND ACADEMIC EXCELLENCE AT SIT VIRTUAL SCHOLARS' TEA

Aside from pursuing academic excellence, SIT Scholars are encouraged to develop themselves holistically beyond the curriculum. A total of 49 SIT Scholars attended the SIT Virtual Scholar's Tea, which promoted greater camaraderie and provided support for personal development. A key focus of the event was to train scholars on how to carry themselves and communicate more effectively. Attendees not only learnt more about themselves and others, but they also picked up techniques on how to express their opinions and needs with confidence.

Learning personal skills at SIT Virtual Scholar's Tea

04 AUGUST SKILLSFUTURE@SIT

SkillsFuture@SIT, organised in partnership with SkillsFuture Singapore (SSG) and the 12 institutes of higher learning (IHLs), saw over 50 online workshops centered around the theme 'Supporting Industry Transformation through Upskilling Singapore's Workforce'.

The event was organised by SIT with the help of SIT students and SITizen Ambassadors. It was also part of SkillsFuture Month from 8 July to 22 August. Close to 29,000 participants accessed SkillsFuture@SIT, where industry leaders and IHLs shared insights through keynote sessions and online workshops with a key focus to assist various groups, such as mid-career job seekers and fresh graduates, in enhancing their skills and employability. The event also saw the launch of SIT's new Competency-Based Workplace Learning pathway.

30 AUGUST–03 SEPTEMBER ORIENTATION 2021: SIT FIRST YEAR EXPERIENCE

After months of planning by over 600 student organisers and facilitators, SIT welcomed more than 2,600 freshmen to the SIT First Year Experience with a series of physical and virtual activities – SIT Helix, Day Zero, Club Fair, and Virtual Platform. Helix is an induction programme and a platform for freshmen to connect with the SIT community, meet fellow freshmen from other degree programmes, and learn more about the services provided for students. This year's SIT Helix was a two-day virtual event that featured three sessions; it was attended by close to 1,000 freshmen and 73 student organisers and facilitators.

Day Zero was held over five days across six campuses, where the freshmen took the opportunity to understand the expectations for their degree programmes and gained useful studying as well as time management tips from their seniors. Day Zero was attended by 2,667 freshmen, 617 student organisers and facilitators, as well as 156 academic staff.

19–22 OCTOBER SIT GRADUATION 2021

The Class of 2021 celebrated their big day across 11 sessions conducted under Safe Management Measures from 19 to 22 October 2021. Mr Chan Chun Sing, Minister for Education, graced the main session of the SIT Graduation, held at The Theatre at Mediacorp. Close to 1,600 graduates from 27 undergraduate and postgraduate degrees, conferred by SIT and joint overseas university partners, received their degree parchments. SIT Graduation 2021 marked the graduation of the pioneer cohort of 46 students from the Aircraft Systems Engineering programme – the first degree of its kind by an autonomous university in Singapore.
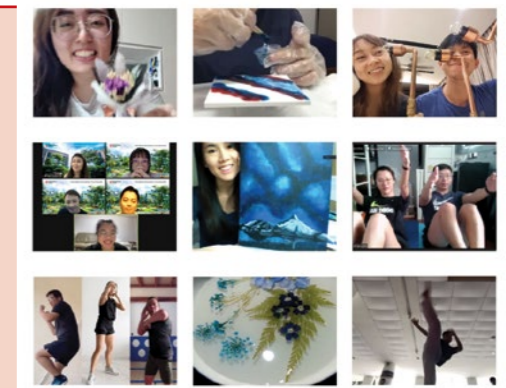
SIT ALUMNI NETWORKS' ONLINE EVENTS: ONE HIT AFTER ANOTHER

Amid the pandemic, alumni continued to learn and have fun with virtual SIT Alumni Network events held throughout the year. The Alumni Leisure Network drew a steady stream of SITizens with online craft workshops such as the Floral Capsule Workshop, Mini Copper Lamp Workshop, and Resin Marbled Coaster Workshop. SITizens also stayed fit with the Alumni Sports Network, sweating it out at Pilates, Zumba, BodyCombat, Muay Thai, and Boxing sessions. Over at the Alumni Career Network, the most popular webinars – such as Buying Your First Home, and Understanding Features and Risks of Major Financial Products – attracted over a hundred alumni attendees who wanted to find out what to do about these important matters.

22 OCTOBER CO-CREATING THE SIT STORY AT SIT SCHOLARS' VIRTUAL CAMP

The SIT Scholars' Virtual Camp welcomed 16 newly-minted scholars to the SIT Scholar Community. Senior SIT Scholars facilitated group discussions on how scholars could play a part in shaping the SIT story. Lively team bonding activities were followed by a dialogue with graduated SIT Scholars, who shared their personal journeys and how being an SIT Scholar motivated them to become better service leaders for the community.
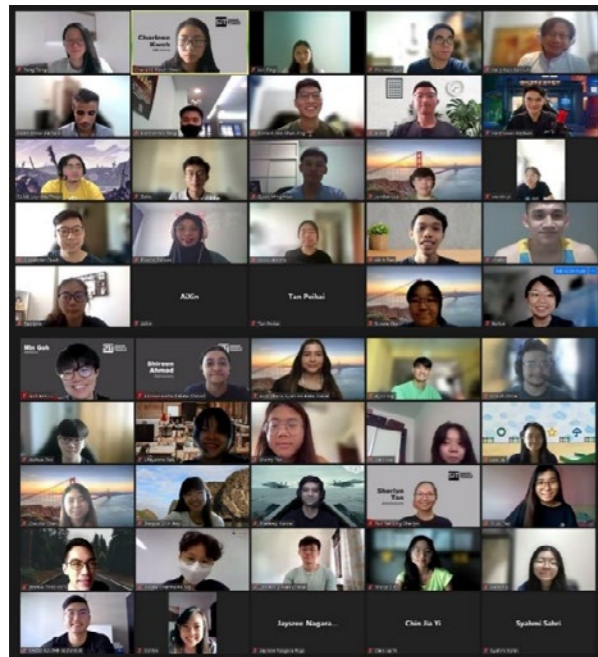
28–30 OCTOBER COMMUNITY CARE INDUSTRY NETWORKING DAY 2021

In partnership with the Agency for Integrated Care and National Council of Social Service, SIT's Centre for Career Readiness hosted the virtual Community Care Industry Networking Day 2021 in October. The two-day event gave first-year students from the Health and Social Sciences cluster an overview of the community care sector in Singapore. About 500 attendees learnt firsthand from industry experts about the importance of community care, and how it is integrated into the larger healthcare system in Singapore. They also gained a better understanding of the roles and career pathways available in this sector.

Attendees at the Community Care Industry Networking Day

11 NOVEMBER HEPA FORUM: HIGHER EDUCATION ADAPTING TO A POST-COVID WORLD

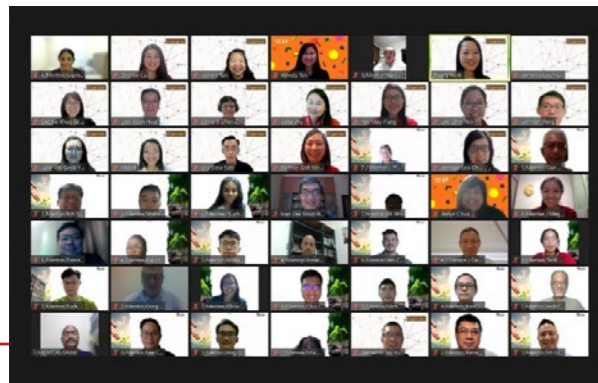The Higher Education Planning in Asia (HEPA) Forum is an annual event that provides a platform for university planners and administrators across Asia to come together to interact, share best practices and network. This year was its ninth consecutive run and the first time it was conducted virtually.

Jointly organised by Ajou University (South Korea) and SIT, the 2021 instalment went virtual and gathered over 200 participants, and more than 20 speakers from Australia, China, India, Japan, Korea, and Singapore. The Forum covered pertinent topics in the rapidly-changing education landscape around Asia, including how universities coped with disruptions brought about by the COVID-19 pandemic in their respective contexts.

22 NOVEMBER SIT SCHOLARSHIP AWARDS AND APPRECIATION CEREMONY 2021

This event welcomed 35 new SIT Scholars and recognised the contributions and achievements of 26 graduating scholars. Ms Devanshi Patidar, graduating scholar from the Diagnostic Radiography programme, shared how being an SIT Scholar shaped her into a better leader. She encouraged her juniors to actively serve as SIT Scholars and contribute to causes close to their hearts. She also shared her gratitude to SIT for the opportunities provided to nurture every scholar's potential.

Ms Patidar shared how being an SIT Scholar enhanced her leadership skills.

25 NOVEMBER RECOGNITION OF EXCELLENCE 2021

This key university event went online amid the pandemic, celebrating the achievements of SIT students and honouring the donors whose philanthropic support has nurtured student excellence at SIT. A total of 62 Book Prizes, Performance Awards, and Gold Medals were presented along with 44 named scholarships to 189 recipients. Most memorably, nine donors expressed their well-wishes for the students through a series of special video recordings.

Students who conceived the NEA recycling receptacle project explained their designs and prototypes to SIT staff and community partners.

25 NOVEMBER CLASIC PROJECT SHARING SEMINAR

The inaugural Community Leadership and Social Innovation Centre (CLASIC) Project Sharing Seminar was held at SIT@Dover and streamed live to SIT staff working from home. CLASIC curates, tracks, and optimises community initiatives and projects by leveraging the interdisciplinary knowledge, expertise, and skills of SIT faculty, students, and staff across different academic clusters. Commemorating the Centre's first year of establishment, the event celebrated the outstanding work of four CLASIC project teams:

- Gamification Design for Nutritional-Healthy Eating Application
- Digital Literacy and Tools for Seniors' Socialisation
- Design of National Environment Agency (NEA) Recycling Receptacle
- Smart Meter to Capture Water Consumption Data in Low-income Households

28 DECEMBER LAUNCH OF PORTAL & APP FOR ALUMNI

For the first time, SIT alumni got their very own Alumni Portal and accompanying mobile app. The new portal allows SIT alumni to access exclusive benefits and services while staying connected with their fellow SITizens through a single mobile app. On the portal and app, alumni can build communities and keep in touch with their fellow SITizens by creating and joining alumni groups, access valuable career opportunities through the Job Portal, as well as register, pay for, and keep track of upcoming Alumni Network events and Alumni Mentoring Programme activities. The app also contains their own personal digital Alumni e-Card.
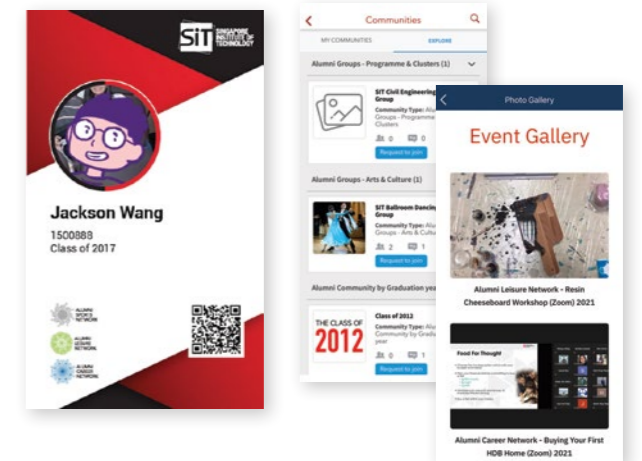
2022

JANUARY

01 JANUARY SIT'S THIRD PRESIDENT

Prof Chua Kee Chaing assumed the role of SIT President, succeeding Prof Tan Thiam Soon who stepped down as President after nine years in the role. Prof John Thong assumed the role of Deputy President (Academic) & Provost with effect from 1 January 2022, succeeding Prof Chua. Prof Chua joined SIT in September 2019 and has led the university's development in academic policies and curriculum, applied learning and applied research, faculty development, as well as student administration.

05 JANUARY SANG NILA UTAMA SCHOLARSHIP APPRECIATION LUNCH

The generosity of five individual and corporate donors has made possible the new Sang Nila Utama Scholarship at SIT. Named after the 13th-century Palembang prince who, according to tradition, founded the Kingdom of Singapura, this prestigious scholarship will nurture forerunners and first-movers for industry and community among high-achieving Engineering, Infocomm Technology, and Health and Social Sciences undergraduates. Thanks to the donors' endowed gifts and the applicable Enhanced Government Matching Grant, an endowed fund of more than $1 million has been set up to support the scholarship in perpetuity.

15 JANUARY ENGAGING PROSPECTIVE STUDENTS AT SIT VIRTUAL OPEN HOUSE 2022

A key focus of SIT Virtual Open House (VOH) 2022 was on how we could provide prospective students and their influencers quality content with the user's experience in mind. As authenticity is key for prospective students, a new Student Ambassadors platform was integrated into the microsite, which allowed prospective students to chat directly with current undergraduates to get their real views of programme offerings and student life. Showcasing our students' applied research projects more prominently was also a key feature this year. Programme talks were in bite-sized formats with a story-telling angle, allowing for more direct and meaningful insights provided by faculty members. This was layered with live coffee chat sessions with professors, alumni, and current students. In addition, prospective students could chat one-on-one with an admissions officer, which generated more opportunities for two-way conversations. 'Stories of SITizens' featured narratives and videos of our current students, scholars, and alumni. The VOH microsite attracted 80,781 page views and 5,640 unique visitors as of 15 March 2022.

16 JANUARY SIT ALUMNI MENTORING PROGRAMME: CYCLE 1 & 2 APPRECIATION CEREMONY

The SIT Alumni Mentoring Programme is a six-month long programme, bringing together SIT alumni and students to foster personal and professional growth. After months of communicating virtually, Alumni Mentors and Student Mentees from the first two cycles finally met in person at its first physical event since April 2021, where they caught up and enjoyed a movie at Projector X: Riverside. Participants were also presented with certificates of appreciation to commemorate their completion of the programme. Cycle 3 began in September 2021, and marked the programme's highest participation rate so far, having successfully matched 63 mentors with 82 mentees.

17–21 JANUARY CAREER NEXUS 2022

Career Nexus is SIT's largest networking event. The platform was abuzz with activities on 19 January when more than 860 industry representatives from 225 companies enjoyed a fruitful networking session with SIT students. More than 1,600 students sought full-time positions or opportunities for their Integrated Work Study Programme. The e-networking saw 43,300 unique visits in total.

The 'Xplore!' webinars saw alumni and guest speakers from various companies reveal insights on managing and deploying disruptive technology, and share their views of work in today's digitalisation age. Industry partners also had access to Project Showcase – a demonstration of 100 innovative projects by SITizens. The showcase gave them an idea of how a potential hire from SIT would be able to craft solutions for their organisations.
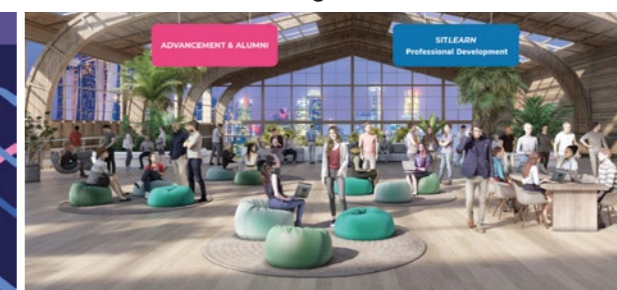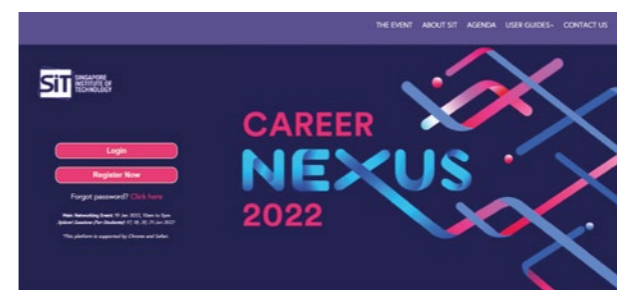
20–21 JANUARY THIRD APPLIED LEARNING CONFERENCE

The Applied Learning Conference (ALC) is one of SIT's key platforms for fostering collaboration between academia and industry to transform the education and workplace learning landscapes. The third instalment of the event was held virtually for the first time in 2022. The two-day event focused on 'Embracing Change in an Era of Disruption' and welcomed more than 400 local and overseas delegates. Comprising thought leaders and practitioners from around the world, the event allowed delegates to share and learn about competency-based education, interdisciplinary learning, and related areas such as lessons from COVID-19, innovative technologies, and applied learning pedagogies.

Ms Gan Siow Huang, Minister of State, Ministry of Education was the guest-of-honour at the event.
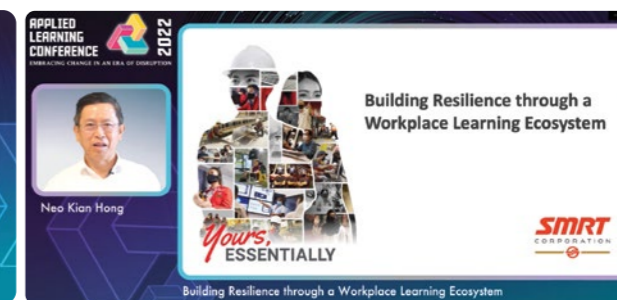
Mr Neo Kian Hong, Group Chief Executive Officer, SMRT Corporation Ltd was one of the plenary speakers.

FEBRUARY

26 JANUARY THE CHUA THIAN POH DISCOVERY HUB MADE POSSIBLE AT SIT'S FUTURE CAMPUS IN PUNGGOL

A new endowed gift of $2.6 million was made possible by Dr Chua Thian Poh to support the development of SIT's future campus in Punggol, and to nurture financially disadvantaged undergraduates through the newly established Chua Thian Poh Bursary at SIT. In recognition of this generous gift, SIT has named the Chua Thian Poh Discovery Hub at its future campus in Punggol. In the interim, before the Punggol campus is operational, the Student Activities Centre at SIT@Dover has been named the Chua Thian Poh Student Activities Centre.

04 FEBRUARY SIT GETS BIGGEST GIFT FROM THE NGEE ANN KONGSI

The Ngee Ann Kongsi formalised its intention to make an endowed gift of $25 million ($2.5 million annually for 10 years) for the development of SIT's library, as well as the establishment of The Ngee Ann Kongsi Emergence Fund to nurture emerging talents and ideas at SIT. In appreciation of the Kongsi's donation – the biggest that SIT has received thus far – the SIT Library at its future campus in Punggol (as well as its interim campus in Dover) has been named The Ngee Ann Kongsi Library.

14 FEBRUARY–02 APRIL SINGAPORE UNIVERSITY GAMES

After a two-year hiatus, the Singapore University Games (SUniG) finally resumed in 2022. Rising to the challenge, SIT athletes showed resilience and determination at the Games as they brought home several medals. The medal tally included a Gold in cue sports; a Gold and a Silver in tchoukball; and a Gold in 9-Ball women's singles. A total of 265 SIT athletes participated in 13 sports including badminton, basketball, volleyball, and ultimate Frisbee. SIT also had the opportunity to host the table tennis games this year.

19–23 FEBRUARY FUTURE-READY LEADERSHIP PROGRAMME 2022

The Future-Ready Leadership Programme (FRLP) is a newly-designed leadership development curriculum that aims to equip SIT's student leaders with relevant, transferable skill sets. FRLP also serves as a platform for student leaders to connect across degree programmes, boost inter-disciplinary collaborations, and grow as future-ready leaders. About 475 student leaders attended the two-day programme and learnt about leadership fundamentals, facilitation, and people management skills. The programme began with a panel discussion with industry professionals and ended with experiential activities to facilitate applied learning.

25 FEBRUARY AMBASSADOR AND SCHOLAR ENGAGEMENT WORKSHOP

The fourth edition of SITizen Ambassador and Scholar Engagement Workshop was conducted in person at SIT@TP Building. The workshop equips our Scholars and SITizen Ambassadors with knowledge of SIT's offerings, alongside public speaking skills to engage potential students and decision-influencers such as parents and teachers during outreach events. A public speaking workshop was conducted, where practical tips on pitching and presenting to virtual and physical audiences with ease and confidence were shared. Participants also engaged in an interactive role-play exercise to apply and practise these skills, while forming new friendships.

MARCH

16 MARCH APPOINTMENT OF NEW CHAIRMAN

SIT welcomed Mr Bill Chang, Chief Executive Officer, Group Enterprise and Country Chief Officer Singapore of Singtel, as the new Chairman to its Board of Trustees with effect from 16 March 2022. Mr Chang took over from Mr Ng Yat Chung, who stepped down on 15 March 2022 as the Chairman of SIT's Board after more than 12 years at the helm.

21–25 MARCH WELLNESS WEEK BY DIVERSITY & INCLUSION ADVOCATES

Wellness Week is a bi-annual affair to promote good mental health and a supportive SIT community. This year's Wellness Week was organised by the Diversity & Inclusion Advocates. Through various activities online and on campus, students learnt about developing coping strategies and explored self-care activities to prevent and manage burnout. A week-long series of activities included mindfulness yoga and art therapy, as well as an outreach and education campaign.

The Diversity & Inclusion Advocates comprise student leaders who embody positive community values and promote inclusion and student well-being on campus. They co-create and drive informative student engagements and outreach events, such as Diversity Day and Wellness Week.
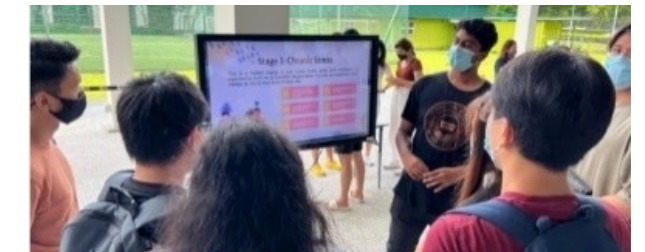
ACADEMIC YEAR IN REVIEW

SIT is committed to an aptitude-based admissions assessment approach that looks beyond academic achievements. Applicants are evaluated holistically; we take into account their passion, relevant work experience, and exceptional achievements related to their programme of choice. This rigorous selection process ensures that SIT admits students with the best fit – those who can thrive in the University's distinctive applied learning environment.

In the AY2021 admissions exercise, 6,583 distinct applicants were interviewed in the new hybrid model. A total of 1,507 face-to-face assessments were conducted as a complement to video assessments to incorporate greater interactivity, while ensuring a balance of efficiency and effectiveness in our admissions assessments. There was a 7% increase in applications and a 2% increase in intake compared with the year before.

APPLICATION VS INTAKE

	Application	Intake
AY 2019/2020	12,185	2,718
AY 2020/2021	11,865	2,900
AY 2021/2022	12,818 ↑7%	2,952* ↑2%
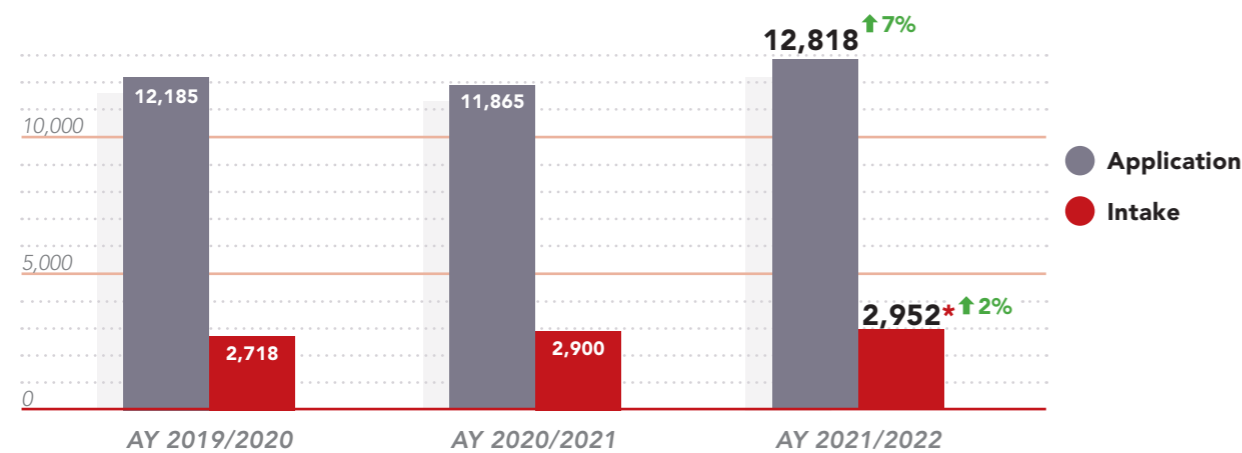
AY2021/22 INTAKE BY QUALIFICATIONS

TOTAL **2,952*** students

- 2,724 students (92.3%)
- 176 students (6%)
- 52 students (1.7%)

ENTRY QUALIFICATION
- Polytechnic Diploma
- GCE A-Level
- Others
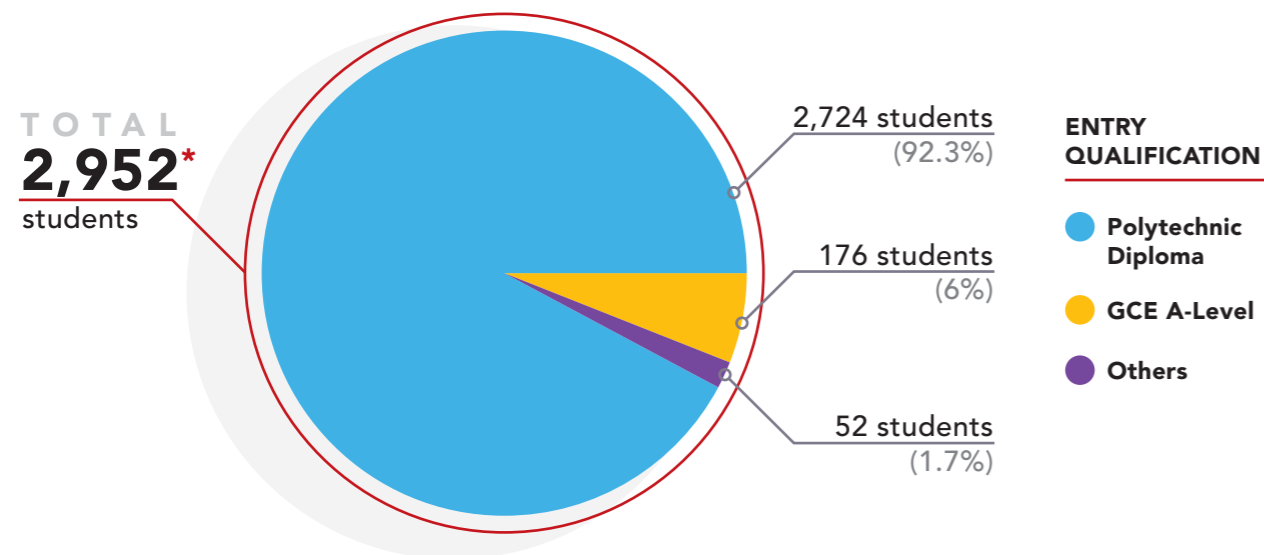
TOTAL MATRICULATED BY ACADEMIC CLUSTER IN AY2021/22

2,952 AS OF 4 OCT 2021

536 students	869 students	274 students	538 students	735 students
18.2%	29.4%	9.3%	18.2%	24.9%

TOTAL **2,952*** students
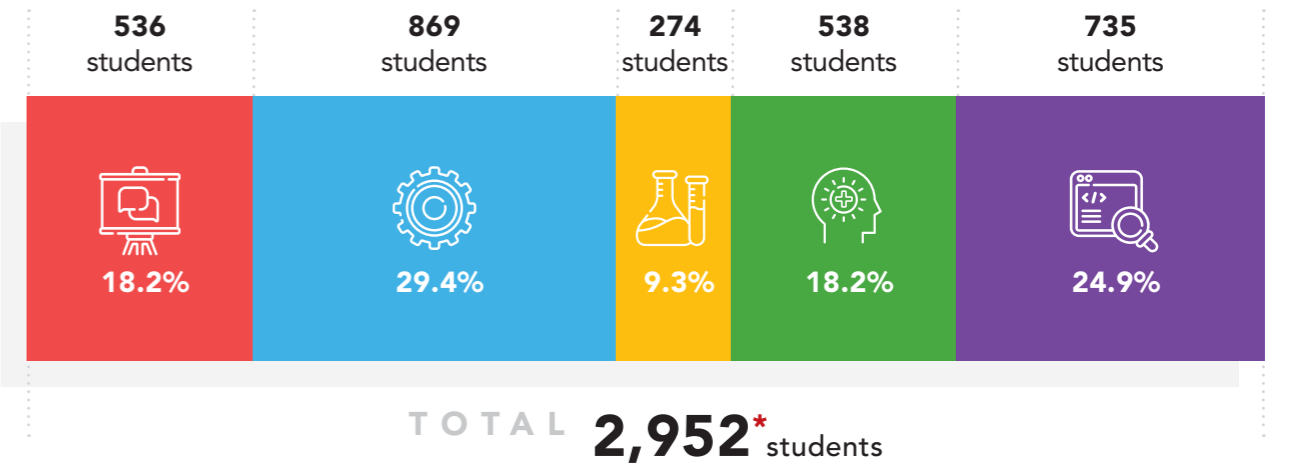
ACADEMIC CLUSTER

- Business, Communication and Design
- Engineering
- Food, Chemical and Biotechnology
- Health and Social Sciences
- Infocomm Technology

PROFILE OF SITIZENS

We welcomed 2,952 new SITizens to the SIT family in AY2021/22.

1 in 2 students
or about 49.1% of students were the first in the family to go to university (defined as those whose parents did not pursue a university education).

Engineering
is the largest academic cluster, admitting 29.4% of the 2021 intake, followed by Infocomm Technology (24.9%).

92.3%
were polytechnic graduates.
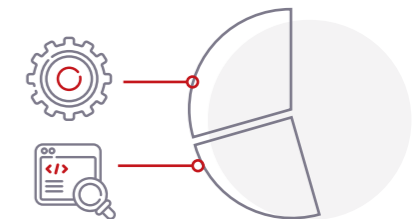
Accountancy, Hospitality Business, and Physiotherapy
were the top three most popular programmes, admitting the highest number of students.

More than **90%** of the students admitted were enrolled into their first- or second-choice programmes.
- ✓ 1st choice
- ✓ 2nd choice

* The total excludes post-graduate enrolment numbers.

PROTECTING THE GOVERNMENT'S CYBERSPACE

Mr Yu Pengfei graduated with a degree in Information and Communications Technology (Information Security) from SIT in 2021. He completed his Integrated Work Study Programme (IWSP) with the Cyber Security Group in GovTech, where he is currently employed.

(From left) Mr Yu Pengfei, Cybersecurity Specialist and SIT graduate with mentor, Mr Ben Quek, Senior Infrastructure Engineer at GovTech.

"SIT's focus on applied learning is relatively different from other universities and I could see it in Pengfei. His hands-on training at SIT has equipped him with strong core skills required in this industry. Beyond that, he possesses transferable skills such as problem-solving and project management, which I believe is the result of the holistic applied learning approach at SIT. Even before he joined GovTech as a full-time cybersecurity specialist, Pengfei was already well-prepared for the industry."

MR BEN QUEK
Senior Infrastructure Engineer
GovTech

APPLIED LEARNING

Central to the University's mission to maximise the potential of its learners and to innovate with industry, SIT offers quality higher education through an integrated applied learning and research approach. The University's specialised degree programmes are intentionally designed to deepen the mastery of skills, with interdisciplinary elements and transferable skills infused into the curriculum.

The education offered at SIT is built upon a solid foundation of industry collaborations. With an expanding line-up of programmes that cater to key economic sectors, students are trained to be agile, work-ready, lifelong learners who are well-prepared to navigate today's complex, fast-paced, and competitive global environment.

NURTURING WORK-READY AND AGILE LIFELONG LEARNERS

In FY2021, SIT made significant strides to deepen applied learning through the harmonisation of programmes with the roll out of the **Undergraduate Programme Structure (UPS)**. Complementing the university's suite of specialised degree programmes that have been designed to prepare graduates to be work-ready professionals in their chosen fields of study, the UPS infuses interdisciplinary and transferable skills into each degree programme. In Academic Year 2021 (AY2021), SIT selected five degree programmes to come under the new programme structure, namely Digital Communications and Integrated Media, Pharmaceutical Engineering, Physiotherapy, Robotics Systems, and Speech and Language Therapy.

SIT's approach to **interdisciplinary learning** is to develop in its students the ability to take in multiple perspectives and to synthesise solutions to complex and multifaceted problems that are characteristic of real-world problems. The University has piloted interdisciplinary learning through a sequence of modules starting with Critical Thinking and Communicating, followed by two Design Innovation modules that are based on a project-based learning approach. Thereafter, the Social Innovation Project allows multidisciplinary student teams to put their interdisciplinary skills into practice while leveraging their disciplinary expertise. Under the UPS, each programme will have at least 15% of total curriculum credits associated with interdisciplinary elements, including programme-specific modules with subject matter from adjacent disciplines.

In FY2021, an **Industry Ready Skills Framework (IRSF)** was formalised to offer structured transferable skills training embedded into both formal and informal curriculum starting from AY2022. IRSF aims to equip graduates with transferable skills that will shape them into agile lifelong learners who are able to progress, adapt, and pivot in their careers. The scaffolded training embodies the overall skills, competencies, and attributes that SIT graduates can acquire to bolster their effectiveness as they step into their professional career. IRSF comprises five competency areas – Thinking Agility, People Agility, Digital Agility, Professional Agility, and Change Agility – and 18 transferable skills that SIT will

focus on, such as Creative Thinking, Digital Data Literacy, and Professional Ethics.

The financial year also saw changes to the names of two academic clusters. This was an outcome of a review to better reflect both the capabilities of each academic cluster, as well as the slate of programmes offered by SIT. The following **academic clusters were renamed** with effect from 1 January 2022:

- Chemical Engineering and Food Technology (CEFT) has been renamed as Food, Chemical and Biotechnology (FCB) cluster.

- Design and Specialised Businesses (DSB) has been renamed as Business, Communication and Design (BCD) cluster.
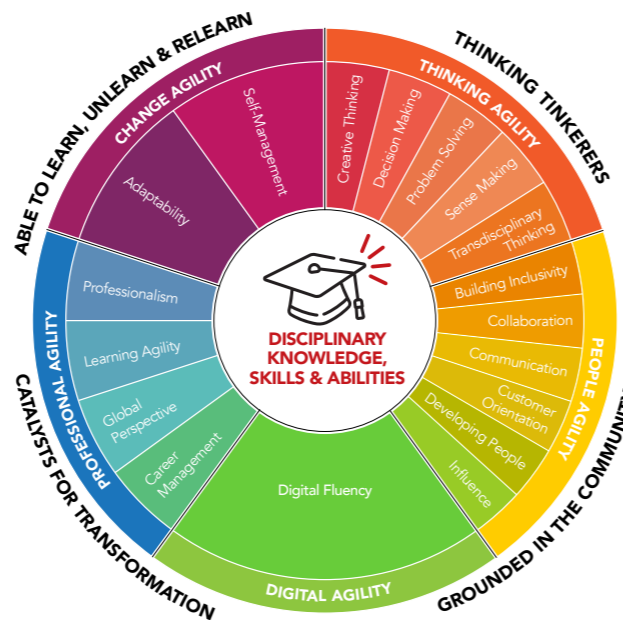
The IRSF offers a structured transferable skills training that focuses on five competency areas – Thinking Agility, People Agility, Digital Agility, Professional Agility, and Change Agility.

NEW DEGREES FOR THE FUTURE ECONOMY

Three new degree programmes aimed at nurturing specialised talents proficient in leading industry transformation will commence in AY2022. The new three-year direct honours programmes are:

- **Bachelor of Science with Honours in Applied Artificial Intelligence.** Through core training in software engineering, machine learning, and professional skills, the programme aims to nurture a strong talent pipeline of artificial intelligence (AI) engineers proficient in developing, deploying, and maintaining AI systems across multiple industry sectors.

- **Bachelor of Science with Honours in Digital Supply Chain.** The programme focuses on emerging technologies in the digital transformation of the logistics and supply chain sector. SIT has established partnerships with the Singapore Logistics Association (SLA), YCH Group, and Y3 Technologies to co-develop and co-deliver the content of the curriculum.

- **Bachelor of Science with Honours in Applied Computing with a specialisation in Fintech.** Developed in partnership with Infocomm Media Development Authority (IMDA) and Monetary Authority of Singapore (MAS), the SkillsFuture Work-Study Degree programme aims to equip graduates with both technical skills and financial domain

knowledge that will position them for careers in the fintech sector.

Additionally, three programmes jointly offered by SIT and Newcastle University – Marine Engineering, Naval Architecture, and Offshore Engineering – have been re-designed to **Bachelor of Engineering with Honours in Naval Architecture and Marine Engineering**. The three-year programme focuses on maritime digitalisation, decarbonisation, offshore renewables, and sustainable design and engineering of the global marine and offshore industry. Specialisations in marine engineering, naval architecture, and offshore engineering will be offered in the upper years of the degree programme.

In collaboration with Singapore Rail Academy (SGRA), SBS Transit and SMRT Corporation, SIT launched the **Postgraduate Certificate in Urban Railway Technology**. Designed for engineering professionals in the local rail industry, the programme draws on SGRA's industry-standard expertise and experience, as well as SIT's applied learning approach to equip them with specialised technical and practical skills to further provide a safe, efficient, and reliable mass rapid transit system in Singapore. Twenty-one participants joined the inaugural run in December 2021 and will receive a Postgraduate Certificate in Urban Railway Technology upon completion of the programme's four modules.

AN INDUSTRY-ENGAGED EDUCATION

As part of the University's strategic focus in pioneering workplace learning, SIT is piloting a new **Competency-Based Workplace Learning (CBWL)** pathway that provides in-employment learners, regardless of their starting qualifications, a means to enhance their skills and pursue a degree while in employment. This first-of-its-kind pathway in Singapore is developed in partnership with Ensign InfoSecurity, the Land Transport Authority (LTA), SBS Transit and SMRT Corporation. Programmes under CBWL aim to upskill the workforce to meet evolving industry needs and achieve greater alignment between academic achievement and work performance. The following CBWL degree programmes were piloted in AY2021:

- **Bachelor of Engineering in Information and Communications Technology (Information Security)**, in collaboration with Ensign InfoSecurity.

- **Bachelor of Engineering and Master of Engineering Technology in Sustainable Infrastructure Engineering (Land)**, in collaboration with LTA, SBS Transit and SMRT Corporation.

The university is also looking to introduce other workplace learning programmes based on a revamped **Term-In/Term-Out (TITO)** work-study modality, where students spend at least a trimester every year in the workplace, working on a project or activity with clear learning objectives for credit. The model allows students to effectively start on his or her career while reading a degree. At the same time, sponsoring companies will be able to green harvest talents in an area of high demand.

Mr Chan Chun Sing, Minister for Education with representatives from Ensign InfoSecurity, LTA, SkillsFuture Singapore, SBS Transit, SMRT Corporation, and the Singapore Railway Academy.

BUILDING CAREER SKILLS AND COMPETENCIES

SIT's Integrated Work Study Programme (IWSP), a salient feature of the University's educational experience, provides students with 8 to 12-month-long work attachments to integrate knowledge with real-world practice. It is an excellent platform for students to gain work experience, while industry partners get access to a pool of work-ready employees.

To better equip students with essential skills in the lead up to their work attachments and future careers, the University's Centre for Career Readiness introduced micromodules in the form of **IWSP (Career Skills)** as a pre-requisite to their IWSP. Comprising five topics curated based on feedback from both students and industry partners, the micromodules aim to prepare students to adopt the right mindset and work attitude, both of which are pivotal to students' career successes and complement their skill sets.

Under the Industry Ready Skills Framework (IRSF), SIT's Centre for Digital Enablement (CoDE) piloted **Digital Competency Essentials (DiCE)** in AY2021, which will be fully rolled out in AY2022. The credit bearing e-module comprises 14 stackable micromodules, covering a range of essential topics such as Digital Safety (including cybersecurity, phishing, and spam), Digital Information, and Data Literacy. Students are required to complete all 14 micromodules at their own pace within their first two years at SIT.

The IRSF also includes a suite of micromodules under the Information and Digital Literacy (IDL) category, managed by the SIT Library. IDL offers skills training in the areas of critical thinking, professionalism and ethics, communication, as well as digital fluency. In AY2022, all undergraduates will be required to complete a micromodule in Essential Research Skills before Year 2.

SIT Library has also explored subscriptions to micro-learning content such as Linkedin Learning and Films on Demand. Such micro-learning content allows students to acquire skills-based learning to fulfil their learning gaps on demand. The same content could also be used by faculty as part of the e-learning for flipped classroom learning and to normalise students with differing learning gaps. This resonates well with the University's direction in empowering students to be more self-directed independent learners.

The University's programme harmonisation efforts also saw SIT's Centre for Communication Skills (CCS) launching the UCS1001 **Critical Thinking and Communicating (CTC) module**. The aim is to develop students' transferable skills that cover critical thinking skills as well as foundational knowledge in writing and speaking in academic contexts. It is also made discipline-specific through the use of content-specific reading texts, case studies, and problems and contexts to teach critical reading, literature reviews, report writing, and presentation skills.

The CTC module has been successfully launched in four degree programmes, namely: Robotics Systems, Digital Communication and Integrated Media, Pharmaceutical Engineering, and Speech and Language Therapy. The module will be rolled out to other degree programmes by AY2022.

The **Communicating Across Curriculum (CAC) instruction** is a major initiative led by CCS to develop students' academic and professional communication skills across all SIT degree programmes. CAC involves embedding assignment-specific writing and speaking instruction within students' content modules. This will help students to apply the communication skills learned in their standalone module and improve their communicative competence. In FY2021, the CAC instruction was embedded in 38 content modules.

Some examples of the CAC instruction are workshops on writing an effective IWSP final report, delivering an effective video presentation, capstone report writing, requirements engineering and elicitation, managing workplace relationships, and critical reflection. The CAC instruction also includes one-to-one consultations on students' draft reports and assessments of students' oral presentations.

In addition, CCS developed and rolled out a series of self-directed learning micromodules on **Workplace Communication** throughout the year. Available to all students via the learning management system, these micromodules are a unique offering among language and communication centres in Singapore's institutes of higher learning.

ENHANCING AUTHENTIC LEARNING EXPERIENCES

SIT organised the inaugural **Punggol Digital District (PDD) Bug Bounty** competition in May 2021, where about 50 students were given four hours to identify vulnerabilities – also known as 'bugs' – that could compromise building management systems hosted on an isolated network managed by the University. The contest was held in partnership with Singapore-based cybersecurity firm Group-IB, the Cyber Security Agency of Singapore, and cyber security community, Division Zero.

Joel Chan (left), together with Prof Tan Thiam Soon, Institute Professor, SIT, at the 'PDD: Connecting Smartness' event on 28 July 2021. Joel won the speed round of the PDD Bug Bounty, where he uncovered the first vulnerability in less than 10 minutes.

The SIT Library facilitates learning opportunities for students to acquire transferable skills through **hands-on activities coupled with microlearning or talks**. These sessions, aimed at holistic development through transferable skills training outside of the formal curriculum, include tinkering with robots, media equipment, and hydroponics farming:

Borrowing Robots at SIT Library
Robots are available for loan to aid students in their learning in robotic automation and artificial intelligence. Three robots are available for loan, each bearing different sensors and functions, such as facial recognition, emotion recognition, simple navigation, obstacle sensor, and colour sensor.

Edibles: Urban Farming Initiatives
30 students who signed up for hydroponics farming will receive hands-on training at the hydroponics system to grow their chosen list of vegetables.

Hands-on Media Production
Students have access to the Gener8 studio at the Library where they can produce various multimedia projects such as podcasts and vodcasts.

Building on the success of the inaugural **Local Immersion Programme** (LIP) in 2020, 56 students from The Culinary Institute of America (CIA) participated in the second edition of the LIP from 26 July to 13 August 2021. They learnt about local food production, consumption, and culinary traditions through visits to various local farms, including Hay Dairies and Kok Fah. Students analysed the complexities of the food systems in Singapore and created a research project based on their critical observations and experiential learning, all while observing Safe Management Measures.

The immersion activity allowed CIA students to learn about local food production, consumption, culinary traditions, and how to apply the knowledge to their culinary creations.

An alternative **Overseas Immersion Programme (OIP)** from 16 August to 3 September 2021 was also organised for students of University of Glasgow (UofG) due to travel restrictions. The academic portion of the OIP was delivered through a hybrid arrangement, with modules led remotely by UofG faculty with support from the Singapore campus and SIT teaching staff. Students from the Mechanical Engineering and Computing Science programmes also had the opportunity to work on a cross-disciplinary design project.

SIT was the first institute of higher learning to conduct a specialised course on 'High Moisture Extrusion Technology (HMET) for Meat Analogues' for the public from 24 to 25 June 2021. A second run took place from 23 to 24 September to cater to the demand from industry.

FoodPlant, a $13 million shared facility for small-batch food production was jointly launched by SIT, Enterprise Singapore, and JTC Corporation after much planning and preparation throughout FY2021. Food companies will have access to high-tech food equipment at the 1,107 sqm facility in Senoko Drive. More than 20 members, made up of multinational corporations and SMEs, have signed up to date. Firms will be able to utilise the equipment on site, tap research and development consultancy services, as well as attend training and upskilling courses in food innovation.

Attendees from the High Moisture Extrusion Technology (HMET) for Meat Analogues course pictured here with FoodPlant CEO, Dr Lim Bee Gim.

CONTINUED PARTNERSHIPS WITH REPUTABLE OVERSEAS UNIVERSITIES

Since 2016, SIT and New Zealand's **Massey University (MU)** have partnered to jointly deliver the Bachelor of Food Technology degree programme. The partnership has been mutually beneficial, leveraging MU's expertise in food technology and SIT's expertise in engineering to deliver a programme with good graduate employment outcome in a key growth sector. The partnership has been renewed for another five academic years. Beyond the delivery of the degree programme, the continued partnership will also allow both universities to explore new collaborations in applied research.

SIT has also renewed its partnership with **Newcastle University (NU)** to continue to jointly deliver several degree programmes that have been established since AY2017. As a member of the Russell Group, NU brings to the partnership valuable engineering expertise in the delivery of the joint programmes. The Russell Group represents 24 leading universities in the UK. The partnership has been renewed for another five years, and includes opportunities for both universities in applied research.

STRENGTHENING TEACHING AND LEARNING

The **Applied Learning and Innovation Grant (ALIGN)** was launched in May 2021 to meet the increased focus on the use of technology to enhance teaching and learning. ALIGN replaces the SIT Advancement of Learning and Teaching (SALT) grant, and is open to all academic staff, with funding of up to $40,000. A total of nine teams were awarded the ALIGN with a combined funded amount of $150,000 in the first grant call.

In November 2021, **Coach Academy**, a digital coaching and mentoring knowledge repository, was launched to equip academic staff with reference materials by leading academic researchers and industry practitioners. The repository is broadly categorised into General Coaching Resources, Coaching Knowledge & Practices, Coaching Science, and Coaching in Education.

In line with the launch of CBWL, the **Centre for Learning Environment and Assessment Development (CoLEAD)** organised several training sessions in 2021 for all academic staff to attend. The key focus was on curriculum design based on the 'backward design' approach, and development of authentic assessments in alignment with course competencies.

To support social innovation projects, the internal **CLASIC Project Grant Scheme** was established in 2021 by the University's Community Leadership and Social Innovation Centre (CLASIC) to evaluate and fund projects proposed by academic staff that harnessed their expertise, as well as students' skills and knowledge. The projects must aim to develop practical and innovative solutions that address national or common social challenges in Singapore. In its first year of establishment, CLASIC has awarded a total of S$53,232 to four projects:

Project Partner(s)	Project Title	Project Lead
National Environment Agency (NEA)	Design a Recycling Receptacle for distribution to all households in Singapore	Mr Kwong Kwok Kuen *Senior Professional Officer*
ECOSOFTT Pte Ltd	Development and installation of a Smart Meter to better manage water usage and cost for the low-income households	A/Prof Steven Tay *Engineering*
Rainbow Centre and HOPE Technik	Design solutions for special needs classroom chairs in Singapore	Asst Prof Karina Dancza *Health and Social Sciences*
Singapore Muslim Women's Association (PPIS)	Design learning activities for PPIS student care centre	Dr Muhamed Fauzi Bin Abbas *Infocomm Technology*

ACCREDITATION MILESTONES

Both SIT academic staff and Professional Officers were involved in the extensive preparations of accreditation reports as well as facilitations of visits and reviews, in accordance to the Washington Accord.

The following degree programmes achieved accreditations in FY2021:

- **Bachelor of Engineering with Honours and Master of Engineering in Sustainable Infrastructure Engineering (Land)** programmes successfully acquired full Engineering Accreditation Board (EAB) accreditations.

- **EAB Accreditation: Bachelor of Engineering with Honours in Pharmaceutical Engineering**, **Bachelor of Engineering with Honours in Information and Communications Technology (Information Security)**, and **Bachelor of Engineering with Honours in Information and Communications Technology (Software Engineering)**.

- The SIT-NU **Bachelor of Engineering with Honours in Mechanical Design and Manufacturing Engineering (MDME)** joint degree programme was awarded accreditation by the IMechE Academic Standards Committee on 16 June 2021.

Accreditation evaluations are in progress for the following programmes:

- Institution of Chemical Engineers (IChemE) Accreditation: The **SIT-NU Bachelor of Engineering with Honours in Chemical Engineering**.

- Marine Engineering, Naval Architecture, and Offshore Engineering degree programmes are accredited by the Royal Institution of Naval Architects (RINA) and Institute of Marine Engineering, Science & Technology (IMarEST). Re-accreditation approval for the newly-merged **Bachelor of Engineering in Naval Architecture and Marine Engineering** programme is being sought by SIT and NU.

- A re-accreditation exercise for the **Bachelor of Accountancy with Honours** has been facilitated for Certified Practising Accountant (CPA) Australia and the Chartered Accountants Australia & New Zealand (CAANZ) in February 2022.

APPLIED RESEARCH

SIT's applied research, which prioritises translational research and innovation, aims to strengthen applied learning and drive industry innovation and transformation.
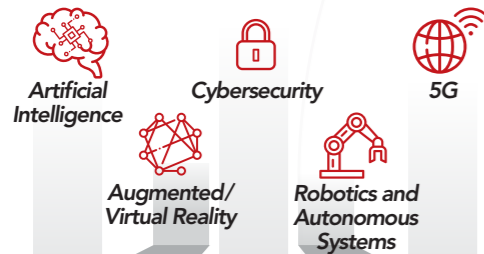
OVERVIEW OF SIT'S APPLIED RESEARCH

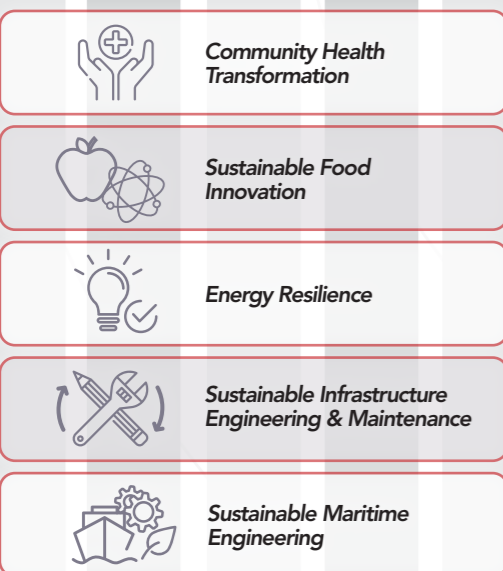### TRANSLATIONAL RESEARCH & INNOVATION FOCUS

SIT's translational research aims to bring low technology readiness levels (TRLs) research a step closer to application, working collaboratively with other Autonomous Universities (AUs) and A*STAR. Currently, SIT's translational research programmes are centred on five domains and supported by five technology enablers.

In FY2021, **Sustainable Maritime Engineering** was added to SIT's suite of Strategic Translational Research Programmes to advance Singapore's capabilities in Future Ship and System Design, Offshore Renewable, and new growth areas.

FIVE ENABLERS

Artificial Intelligence

Cybersecurity

5G

Augmented/ Virtual Reality

Robotics and Autonomous Systems

POWERING FIVE DOMAINS

Community Health Transformation

Sustainable Food Innovation

Energy Resilience

Sustainable Infrastructure Engineering & Maintenance

Sustainable Maritime Engineering

SIT's strategic translational research programmes and technology enablers.

APPLIED RESEARCH CENTRES (ARCs)

SIT's innovation activities are focused on TRLs 5–7 with the aim to help companies move up the innovation value chain. Over the last two years, SIT has set up several ARCs in areas associated with our Strategic Translational Research Programmes.

ENERGY EFFICIENCY TECHNOLOGY CENTRE (EETC)

EETC is a collaboration with the National Environment Agency (NEA) to build the energy efficiency capabilities of the local ecosystem. EETC achieves this by providing expertise and capabilities to companies to assist them in becoming more energy efficient.

CENTRE FOR INFRASTRUCTURE AND TUNNEL ENGINEERING (CITE)

CITE is established in partnership with Land Transport Authority (LTA). It will serve as a platform for the civil engineering community to exchange and deepen their knowledge and skill sets. The Centre will also conduct and facilitate applied research to augment safety standards in the design, construction, operation and maintenance of tunnels, as well as other civil engineering infrastructure.

INNOHUB

InnoHub provides an integrated end-to-end innovation infrastructure to help industry with their innovation journey. InnoHub encompasses the following four synergistic Innovation Centres:

Design Factory@SIT (DF@SIT)

DF@SIT is a component of SIT's innovation platform that aims to guide businesses to find their unique value proposition via a multi-disciplinary co-creation approach for design innovations. DF@SIT has collaborated with various organisations on diverse projects, offering deeper insights into how people live, work and play. In the past year, DF@SIT has facilitated five innovation projects and six engagements that enabled more than 200 students and industry personnel to better understand design innovation approaches.

Rapid Product Innovation and Development (RaPID) Centre

RaPID Centre is a specialised product development facility that supports companies, including SMEs and start-ups, in the design and development of new products through iterative rapid prototyping and small-batch production before scaling up for manufacturing.

SIT-Poly Innovation Centre of Excellence (SPICE)

Supported by Enterprise Singapore, **SPICE** is a first-of-its-kind university-polytechnic centre. It aims to promote collaboration among the various Centres of Innovation (COIs) at the polytechnics and ARCs at SIT to support local SMEs in their technology-driven transformation, innovation and talent development initiatives. SIT staff and students can collaborate on innovation projects through SPICE, developing capabilities and a talent pipeline of innovators.

National Additive Manufacturing Innovation Cluster (NAMIC) Hub@SIT

NAMIC focuses on additive manufacturing solutions and technologies, as well as sustainable additive manufacturing that can be applied across sectors such as Rail Transport, Offshore and Marine, and Food Technology.

DSO-SIT JOINT RESEARCH LABORATORY

The **DSO-SIT Joint Research Laboratory** was operationalised to spearhead applied research efforts for potential defence and commercial use. The collaboration commenced with strategic translational projects in the fields of robotics/unmanned systems and cybersecurity, involving SIT faculty staff and students from the Engineering and Infocomm Technology clusters.

FUTURE COMMUNICATIONS TRANSLATION LAB (FCTLAB)

FCTLab aims to drive applied research and innovation in 5G and future communications technologies. Through meaningful collaborations with industries and public agencies, the FCTLab seeks to co-create intellectual properties for commercialisation with our partners, grow demand-led research and innovation, as well as strengthen the transfer of capabilities to locally-based companies.

FOODPLANT

FoodPlant is Singapore's first shared facility for small-batch food production to support innovation in the food manufacturing industry. Jointly launched by SIT, Enterprise Singapore, and JTC Corporation, FoodPlant is a 1,107 sqm shared facility that provides food companies access to industry expertise, specialised equipment, as well as a suite of training courses to enhance the capabilities of food tech professionals. The objective is to facilitate transformation in the food technology space, bringing it closer to a more resilient and sustainable local food supply, in support of Singapore's '30 by 30' goal.

CONSTRUCTION TECHNOLOGY INNOVATION LABORATORY (CTIL)

CTIL is a collaboration between SIT and Woh Hup Pte Ltd. It provides a platform for Singapore-based construction companies to carry out applied research, develop innovative technologies for building structures and sub-structures with societal and economic impact, together with SIT researchers.

RESEARCH GRANTS FOR FY2021

INTERNAL GRANTS

In FY2021, SIT extended its internal grant platform to support non-Science, Technology, Engineering and Mathematics (STEM) projects in addition to STEM projects. The aim of the Ignition Grant is to develop academic staff's capability to work with companies in early stage translational research.

EXTERNAL GRANTS

The total external grants awarded to SIT have shown an upward trajectory from $4.1 million in FY2018 to $32.2 million in FY2021 (Figure 1A). Industry cash and in-kind contributions pegged to grants saw an increase from FY2018 to FY2020 but a dip in FY2021, largely due to the impact of COVID-19 (Figure 1B). The number of externally-funded projects grew from FY2019 to FY2021, with a total of 29 external grant projects awarded in FY2021 (Figure 1C). There was also a good mix of industry collaborators in SIT's applied research projects, ranging from MNCs, SMEs to start-ups (Figure 1D).

NEW GRANTS

In FY2021, SIT received its first MOE Academic Research Fund (AcRF) Tier 2 as well as A*STAR Industry Alignment Fund (Pre-Positioning) (IAF-PP) grants.

MOE AcRF Tier 2 Grant

Rethinking HVAC System Design in Post-Pandemic World
Principal Investigator: Asst Prof An Hui
As COVID-19 is airborne, improving indoor ventilation is critical. This project will study the infection probability model under various conditions. Quantitative recommendations for the ventilation strategies and passive engineering control will then be applied to reduce the transmission risks. This project is done in collaboration with Changi General Hospital.

Control Algorithm for Spacecraft Formation Flying
Principal Investigator: A/Prof Gianmarco Radice
The research team, in collaboration with NuSpace, aims to develop novel control algorithms to allow small spacecraft (CubeSat) to perform formation manoeuvres with safety features such as collision avoidance. Large CubeSat constellations with this algorithm would provide an autonomous orbit maintenance solution to ground operators, offloading the once laborious manual task of orbit maintenance.

*A*STAR IAF-PP*

Automated Protein Profiling and Characterisation Platform
Principal Investigator: Asst Prof Du Juan
The aim of this programme is to build an automated protein profiling and functional characterisation platform to accelerate the development of safe and tasty plant-based foods and contribute to Singapore's '30 by 30' food security target. This programme has work packages, which are co-led by A*STAR and the National University of Singapore, with Massey University as a collaborator. At least five industry partners will join the research team in the co-development and test-bedding of the solutions.
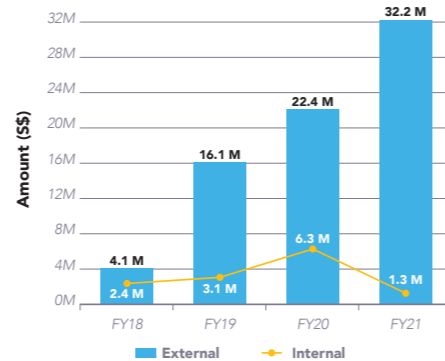
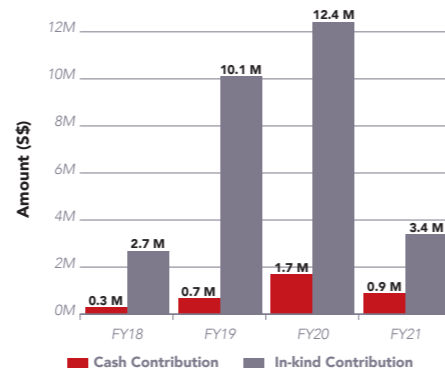

Figure 1A. Total Grant Amount Awarded

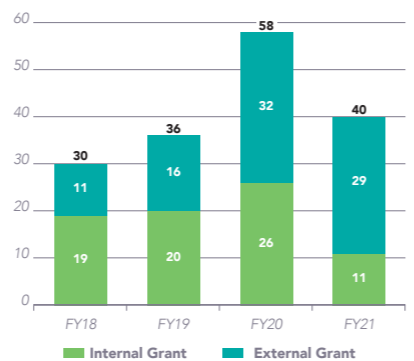*Figure 1B. Industry Contributions to Applied Research Grants*
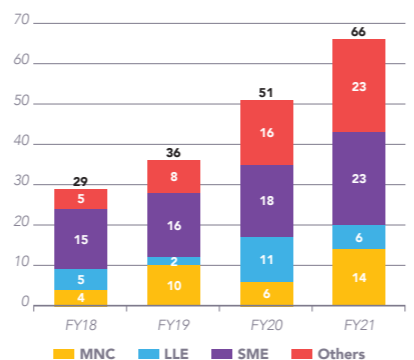

Figure 1C. Number of Applied Research Projects

Figure 1D. Number and Profile of Industry Partners

INITIATIVES IN FY2021

GRANTSMANSHIP WORKSHOPS

In FY2021, a series of grantsmanship workshops were organised to strengthen internal grantsmanship skills and improve the quality of proposal submissions. Internal speakers from SIT, who were successful in landing external grants, shared tips on writing successful grant proposals with fellow colleagues. Invited speakers included Dr Roger Chuah from the National Health Innovation Centre (NHIC) who shared about the different grant platforms offered by NHIC and expected project deliverables from these platforms. Dr Julian Tang from Wildtype Media Group Pte Ltd also conducted a half-day workshop on writing concise, coherent, and compelling grant proposals.

RAISING AWARENESS OF RESEARCH INTEGRITY AND ETHICS

In partnership with Research Governance Committees, SIT's Applied Research Office (ARO) organised activities to raise awareness on the importance of upholding the highest standards of research integrity and ethics amongst academic staff, research staff and students. A key event was the 'Research Integrity and Ethics Joint Awareness Day' to promote good research practices. The webinar focused on data governance, navigating research ethics in the pandemic and biosafety. The chairpersons and representatives from the respective research governance committees led a discussion on the impact of integrity and ethics on SIT researchers' work.

The Research Integrity Committee has also organised a series of lunchtime talks on the responsible conduct of research. Given today's pervasive use of technology such as AI and digitilisation tools, discussions centred around ethical considerations in using such technology. Other topics covered include responsible publication and research communication in open research.
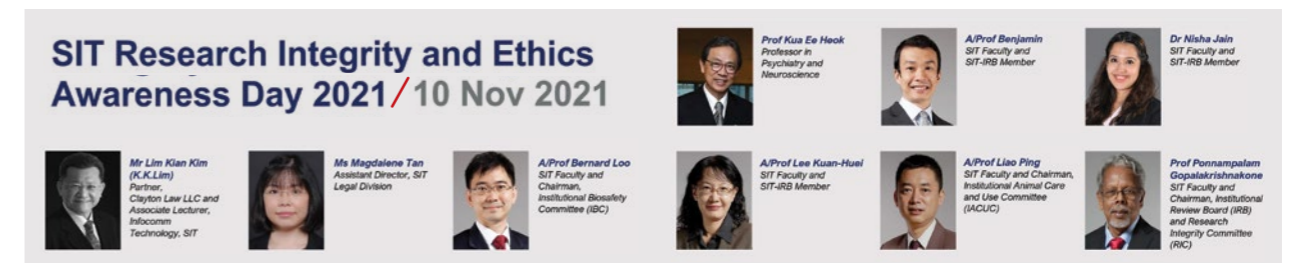
Research Integrity and Ethics Joint Awareness Day programme.

INSTITUTIONAL RESEARCH REPOSITORY

In partnership with SIT Library, ARO developed and implemented an 'Open Access Policy' and set up an Institutional Research Repository (IRR) to facilitate the sharing of SIT's research outputs. The IRR aims to promote collaboration in research, raise the visibility of SIT's research activities, and adhere to grantor's requirements for open access.

GROWING POSTGRADUATE BY RESEARCH INTAKE

Our Postgraduate by Research (PGR) Programmes matriculated nine students in FY2021, achieving a total enrolment number of 15. Partner organisations in our Industrial Doctorate and Masters programmes include A*STAR, JTC Corporation, Khoo Teck Puat Hospital, and Sembcorp Marine.

Programmes		Enrolment	Partnering Companies/Organisations
Industrial Masters	Master of Engineering	5	ams Sensors Singapore Pte Ltd, Building System and Diagnostics Pte Ltd, Jurong Town Corporation, SATS Catering Pte Ltd, Sembcorp Marine Integrated Yard Pte Ltd
Industrial Doctorate	Doctor of Engineering	8	Advanced Remanufacturing and Technology Centre (A*STAR), C&W Services (S) Pte Ltd, HP PPS Asia Pacific Pte. Ltd., Land Transport Authority Singapore, NVIDIA Corporation, Singapore Institute of Manufacturing Technology (A*STAR), TÜV SÜV
	Doctor of Clinical Research in Health Sciences	2	Alexandra Health Pte Ltd, NTUC Health Co-Operative Limited

APPLIED RESEARCH PROJECT HIGHLIGHTS

NEW PILING TECHNOLOGY FOR CONSTRUCTION PRODUCTIVITY

In Singapore, non-displacement piles are commonly used to comply with vibration and noise requirements. However, the construction process of these piles is time-consuming and hence expensive. Asst Prof Ho Jiahui collaborated with Zhao Yang Geotechnic (ZYG) to introduce drilled displacement steel pile (DDSP) technology through a research project funded by the SIT Ignition Grant.

New cost-saving piling technology.

Smart AI indoor smoking detection.

SMART AI MONITORING SYSTEM

Asst Prof Donny Soh and Hitachi Asia developed an integrated solution comprising deep learning techniques in video analytics and 3D scans to detect crowds during the COVID-19 pandemic. The system is also capable of detecting illicit actions such as indoor smoking. The system is currently deployed at SIT@NYP Building, and Hitachi Asia is planning to incorporate the applied research work into their solutions.

Donning the EXO+ hip protector has given Mr Mohamed Hafidz bin Samat, 59, greater confidence to walk more and rely less on his wheelchair. (Photo courtesy of Ren Ci Hospital)

BESPOKE HIP PROTECTOR EXO+ FOR FALL-PRONE SENIORS IN REN CI HOSPITAL

A/Prof Soh Chew Beng and G4 Pte Ltd devised EXO+, which is a hip protector that can reduce the impact force by up to 20% on the femur. It is made of a stretchable material that can return to its original structure after the impact is released. EXO+ is also easy to put on and more breathable. Ren Ci Hospital will be deploying EXO+ at its nursing homes to an initial group of 100 residents with fall-risk potential.

HANDYREHAB™ – WEARABLE REHABILITATION ROBOT

A/Prof Wee Seng Kwee examined the feasibility and user experience of a wearable rehabilitation robotic device known as HandyRehab™ for chronic stroke patients. They worked with clinical partners from Kwong Wai Shiu Hospital, Ang Mo Kio-Thye Hua Kwan Hospital, and Fourier Intelligence to recruit 10 chronic stroke patients. Together they co-developed an inventory of hand activities that enables task-specific training with real objects used in activities of daily living, for example, cups, cutlery, and utensils.

Training the weak upper limb to perform activities of daily living with a wearable hand robot.

Clean probe

A
Fouling (after 1 batch)

B
Non-charging housing

C
Probe with housing (3 batches)
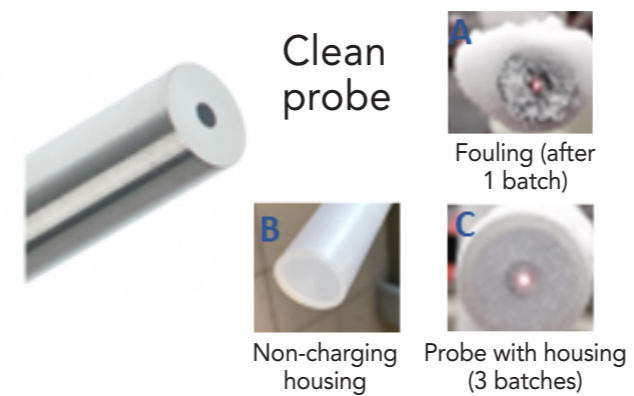
Non-charging housing for reactor probe.

NON-CHARGING HOUSING TO IMPROVE POWDER PROCESSING

In powder processing, the static charge generated by contact electrification can cause undesirable consequences. The electrostatic charge causes adhesion of particles, which is a common cause of fouling. In this project, funded by A*STAR Advanced Manufacturing and Engineering Young Individual Research Grant (AME YIRG), A/Prof Wong Shin Yee developed a non-charging housing that prevents the adhesion of powder onto the probe. The implementation of the non-charging housing enables the probe to perform continuous and accurate monitoring of the powder. The team is looking at validating proof-of-concept achieved in an innovation project.

UPSCALING KALE WASTE

Kale has become popular as a superfood. Together with Sustenir Agriculture, A/Prof Cheow Wean Sin, Principal Investigator, was able to optimise the use of all kale parts while preserving the nutrient content. Important findings from this project include: (1) kale stalks are equally as nutritious as kale leaves, (2) kale powder remains nutritionally attractive, and (3) innovative kale powder-based food products such as pasta, cookies, and baby food are easily made.

4.9% Kale Powder

Control

100% Kale Juice
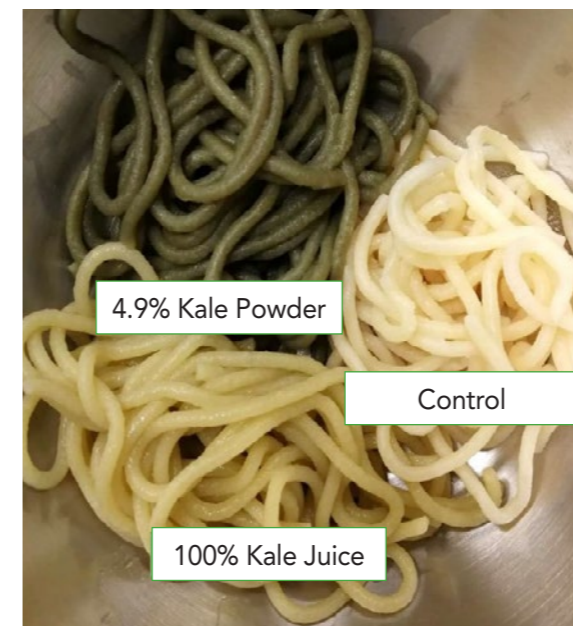
Kale pasta from kale powder and juice.

Dual Passive Displacement Cooling (PDC) coil system
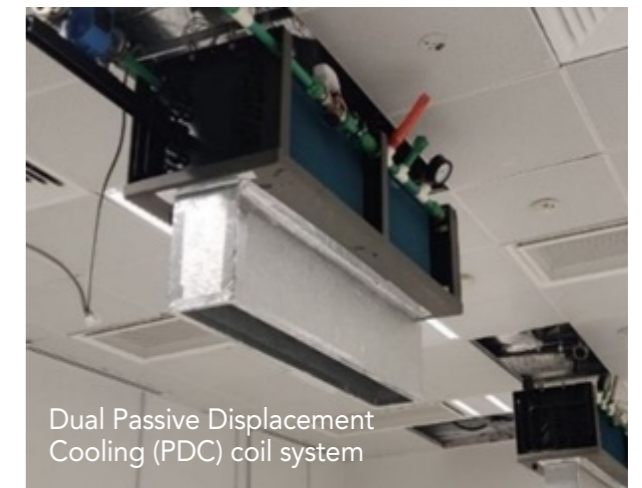
Optimised indoor air-conditioning system.

IMPROVING THE ENERGY EFFICIENCY OF AIR-CONDITIONING

A research team led by A/Prof Steve Kardinal Jusuf, Asst Prof Aung Myat, Asst Prof An Hui, and A/Prof Victor Wang evaluated the performance of the Dual Passive Displacement Cooling (PDC) coil system through a research project funded by BCA Green Building Innovation Cluster. The design parameters of PDC were analysed via Computational Fluid Dynamics (CFD) simulation. The experimental results showed that the Dual PDC coil system has up to 40% latent load removal. Thermal comfort survey results showed the cooling system to be generally comfortable, with acceptable air humidity and thermal sensations.

BLOCKCHAIN IN THE LEGAL INDUSTRY

Asst Prof Purnima Murali Mohan and her team successfully implemented a proof-of-existence (PoE) blockchain framework system based on Ethereum smart contracts at a prominent Singapore legal firm.

The system ensures reliable evidence in courts of law regarding plagiarism cases, intellectual property disputes, infringements of copyrights of artefacts, trade secrets, etc.

> **"The faculty and staff at SIT have been working tirelessly over the last few years on the microgrid project. We are appreciative of the strong support from SP Group and look forward to many more collaborations to build a sustainable future in the energy landscape."**
>
> **PROFESSOR TSENG KING JET**
> *Director of Programmes, Engineering*
> *SIT*

TOWARDS A ZERO EMISSIONS FUTURE

SP Group, a leading utilities group in the Asia Pacific, is building a Multi-Energy Microgrid (MEMG) to support SIT's energy demands at its upcoming campus in Punggol. It will supply more than 2,000 MWh of electricity annually from photovoltaic solar panels, equating to 4% of the total energy needs of the campus. The microgrid will be able to integrate electricity, thermal and renewable sources of energy into a unified smart energy network, to support applied learning and research, as well as experimentation in a real-world environment.

(From left) Professor Tseng King Jet, Director of Programmes, Engineering, SIT and Dr Michael Lim Tian, Head, Energy Services, Sustainable Energy Solutions, SP Group at the building-level islanded microgrid at SIT@NYP Building.

> **"At SP, we focus on low-carbon, smart energy solutions. Our partnership with SIT will provide a sandbox environment to test-bed Singapore's future energy system while minimising risks of disruptions to operations. We are excited at the prospects that this collaboration will bring, especially in areas that will help Singapore address its energy resilience and energy management issues."**
>
> **DR MICHAEL LIM TIAN**
> *Head, Energy Services, Sustainable Energy Solutions*
> *SP Group*

INDUSTRY

SIT is a university that lives and breathes industry. Placing individuals and industry at the heart of SIT, our focus is on supporting industry's growth and transformation through meaningful collaborations and a pipeline of work-ready graduates. We also provide competency-based education to enhance the resilience of the workforce.

Through collaborations with small and medium-sized enterprises (SMEs), multinational companies, and government agencies, SIT plugs into a diverse ecosystem to ensure that its academic curriculum remains robust to meet the evolving needs of the industry. Companies have a ready partner in SIT to help transform processes, move up the innovation value chain, and develop manpower capabilities.

FRONTING WORKPLACE LEARNING

As Singapore's University of Applied Learning, SIT strives to champion workplace learning as an integral component of the work-learn continuum. The **National Centre of Excellence for Workplace Learning at SIT (NACE@SIT)** is the first workplace learning centre in an autonomous university. Supported by SkillsFuture Singapore (SSG), NACE@SIT aims to help organisations, especially SMEs, build workplace competencies through various workplace learning initiatives and projects.

A major initiative during FY2021 was the pioneering of the **Competency-Based Workplace Learning (CBWL)** pathway for adult learners in August 2021, which saw employees from Ensign InfoSecurity, SBS Transit, and SMRT Corporation enrolling into two SIT undergraduate degree programmes. The success of the pilot scheme will establish a foundation and enable SIT to introduce this pathway to workplace learners in more sectors, through close collaborations with like-minded industry partners.

QUEEN BEE PARTNERSHIP WITH SMRT CORPORATION LTD (SMRT)

As part of the **SIT-SMRT SkillsFuture Queen Bee Initiative**, SIT has jointly developed and delivered several workplace learning programmes with SMRT, namely the 'Corporate Coaching and Mentoring programme' to train SMRT's supervisors with coaching skills and 'The Kaizen Project' to train SMRT's value-chain partners. As of January 2022, 80 employees from 25 SMRT's value-chain partners were trained. They included companies such as Aras Holdings, Stamford Tyres International Pte Ltd, NSL Oilchem, and Peak Engineering Pte Ltd.

To further entrench workplace learning, the **Kaizen Learning Centres** were launched in January 2022 in collaboration with SMRT and SSG. The Centres will support the building of a strong skills ecosystem and workplace learning culture to drive innovation and productivity within the land transport industry. The centres offer facilities to provide hands-on practice and training in Kaizen concepts and tools, not just for SMRT staff but also employees of partner companies in SMRT's ecosystem.

The launch event of Kaizen Learning Centres was attended by Minister for Education Mr Chan Chun Sing and key senior management representatives from SkillsFuture Singapore, SMRT Corporation Ltd, and SIT. (Photo courtesy of SMRT)

COLLABORATION WITH SOCIAL SERVICE INSTITUTE

NACE@SIT has collaborated with the Social Service Institute (SSI), a Continuing Education and Training (CET) unit under the National Council of Social Service (NCSS), to build workplace learning capabilities of social service agencies (SSAs). This initiative, termed as the **Enterprise Transformation Initiative on Workplace Learning**, aims to improve employee productivity and performance, and enhance work processes for operational efficiency within the SSAs. To date, six SSAs are on board this initiative, namely PERTAPIS Education and Welfare Centre, Apex Harmony Lodge, CampusImpact, Silver Ribbon Singapore, Lion Befrienders Service Association, and RSVP Singapore.

CORPORATE COACHING AND MENTORING

NACE@SIT has partnered SIT's Centre for Communication Skills (CCS) to develop and conduct a corporate coaching and mentoring programme, a key workplace learning initiative targeted at companies to strengthen staff development. Company supervisors acquire mentoring and coaching skills that will improve their supervision and mentoring of co-workers and SIT students on **Integrated Work Study Programme (IWSP)**. This leads to enhanced motivation and performance among workers as well as fruitful learning experiences for SIT students.

WORK-READY TALENT POOL

To develop career-ready and employable students, SIT's Centre for Career Readiness (CCR) actively seeks collaborations with industry partners to offer applied learning opportunities for its students. These include the IWSP, career events, and mentorship programme.

INDUSTRY MENTORSHIP PROGRAMME

Into its fifth run, the Industry Mentorship Programme 2022 saw participation from 106 mentees and 76 mentors from 17 engineering-related degree programmes. In partnership with Young NTUC, the four-month programme pairs students with an industry mentor from a relevant industry to enable students to gain industry-specific career advice and guidance in developing their career path.

Attending the Industry Mentorship Programme via Zoom.

EXPANDING IWSP OPPORTUNITIES WITH SMES

The IWSP is a trademark of an SIT education, which allows students to integrate theory and practice, and develop deep specialist skills in a real-world workplace setting. Within the companies, students are assigned meaningful projects, learn from experienced colleagues, and bring back learnings to the classroom.

FY2021 saw SIT partnering with A*STAR and Enterprise Singapore (ESG) to engage SMEs to provide IWSP opportunities for its students.

A notable initiative was the A*STAR-SIT Technology for Enterprise Capability Upgrading (T-Up)/IWSP collaboration, where Industry R&D IWSP opportunities with SMEs were created for SIT students. This tripartite partnership enabled the SMEs to take up T-Up projects with A*STAR, while researchers seconded from A*STAR to the SMEs will mentor and work with the IWSP students on the project. To date, a total of 8 T-Up/IWSP with SMEs have been successfully completed, with more slated for completion in 2022.

Together with ESG, SIT also engaged progressive SMEs in the Advanced Manufacturing, Engineering Services, and Med-Tech sectors for IWSP. Through two jointly organised webinars and targeted engagements, 38 IWSP positions from 12 companies were garnered.

FORGING STRATEGIC COLLABORATIONS WITH INDUSTRY

Robust engagement with industry through collaborative tie-ups is pivotal in paving the way for the exchange of knowledge and catalysing innovations. In AY2021, SIT forged several MOUs and partnerships with the industry in various areas.

PDD CONNECTING SMARTNESS EVENT

Punggol Digital District (PDD), the future home of SIT, is Singapore's first smart business district. SIT participated in JTC's 'PDD: Connecting Smartness' event on 28 July 2021 to showcase areas of collaboration with key PDD tenants in creating a living lab for new concepts and solutions.

SHAPING THE NEXT GENERATION OF TECH TALENT WITH DELL TECHNOLOGIES

An MOU to enhance the pre-employment training curriculum was signed between Dell Technologies, SIT, Singapore Management University, Ngee Ann Polytechnic, and Singapore Polytechnic on 3 December 2021. Under the partnership, new content will be co-developed to equip students from the four institutes of higher learning with critical core skills in new and emerging technologies such as cloud computing, data analytics, the Internet of Things (IoT), and digital cities management. Students will also have access to a suite of self-guided e-learning courses via Dell Technologies' digital learning platform.

Representatives from Dell Technologies and Institutes of Higher Learning signing the MOU (seated, from left): Prof Chua Kee Chaing, SIT President; Mr Ng Tian Beng, Senior Vice President & General Manager, Channel, Asia Pacific & Japan, Dell Technologies; and Prof Timothy Clark, Provost, Singapore Management University. The signing ceremony was witnessed by (standing, from left): Mr Tan Kiat How, Senior Minister of State, Ministry of Communications & Information and Ministry of National Development; and Mr Amit Midha, President, Asia Pacific & Japan, and Global Digital Cities, Dell Technologies. (Photo courtesy of Dell Technologies)

ESTABLISHING THE CENTRE FOR INFRASTRUCTURE AND TUNNEL ENGINEERING (CITE)

An MOU was inked between SIT and Land Transport Authority (LTA) on 20 December 2021 to establish the **Centre for Infrastructure and Tunnel Engineering (CITE)**. The partnership seeks to strengthen Singapore's tunneling and underground infrastructure development capabilities, and build a steady pool of tunnel engineers with specialised domain knowledge in civil and geotechnical engineering.

From left: Er Chua Chong Kheng, Deputy Chief Executive, Infrastructure & Development, LTA; Mr Ng Lang, Chief Executive, LTA; Prof Chua Kee Chaing, SIT President; and Prof Tan Thiam Soon, Institute Professor, SIT. (Photo courtesy of LTA)

CITE will develop and offer customised training courses to reskill and upskill local professionals. It will also conduct and facilitate applied research to augment safety standards in the design, construction, operation and maintenance of tunnels, as well as other civil engineering infrastructure.

KASPERSKY AND SIT RENEW PARTNERSHIP

An MOU signed with Kaspersky in December 2021 saw the global cybersecurity company partnering SIT in several areas to support Singapore's proactive cybersecurity strategy. These include curriculum development, consultancy in the areas of digital forensics, malware analysis, threat intelligence, threat hunting and incident response, as well as student and staff training opportunities along with student internship programmes.

DRIVING IMMERSIVE TECHNOLOGIES FOR THE LOCAL LEARNING COMMUNITY

SIT and the Singapore Discovery Centre (SDC) signed an MOU on 26 January 2022 to collaborate on advancing capabilities in virtual reality, augmented reality, as well as interactive and digital media, with the aim to enhance the educational and experiential learning of students.

This partnership also showcased the Do-it-Yourself Augmented Reality (DIYAR) goggles, a creation of SIT faculty and students, at SDC's X-Lab. The X-Lab is a platform to highlight the parties' joint applied research projects, profile the research outcomes to a wider community, and to enthuse the younger generation on science and technology.

SIT students' DIYAR goggles are showcased at the X-Lab, located in the Permanent Exhibits Gallery – Sandbox, where SDC collaborates with IHLs to co-create and showcase innovative projects in immersive technologies.

STRENGTHENING R&D EFFORTS IN SUSTAINABLE MARITIME ENGINEERING

SIT and the Technology Centre for Offshore and Marine, Singapore (TCOMS) signed an MOU on 24 March 2022 to strengthen R&D collaboration and grow the talent pool for Singapore's maritime, marine and offshore engineering, and other ocean sectors. This partnership will involve staff exchanges between the two partners to leverage the talent and expertise in both organisations, in areas such as naval architecture, fluid-structure interaction, as well as maritime autonomy and control. TCOMS will host SIT students on their internships. SIT will also be able to access TCOMS' R&D facilities, such as its ocean basin facility, for applied research and educational purposes.

Prof Chua Kee Chaing, SIT President (left), and Prof Chan Eng Soon, CEO of TCOMS, at the MOU signing.

ADVANCING STUDENT DEVELOPMENT IN TECHNOLOGY

SIT and the ISACA Singapore Chapter signed an agreement on 28 March 2022 to collaborate on activities spanning areas such as academic awards, student development, as well as talks and workshops. This paves the way for SIT students to expand their opportunities for real-world experience, whether through ideas for capstone collaborations or assisting in seminars and conferences organised by ISACA. As a professional association focused on IT governance, risk, audit, and cybersecurity, ISACA's network of professionals can share their knowledge and insights on information technology, cybersecurity, and innovation, to support SIT's efforts in preparing graduates for an increasingly digital world.

FROM WORK-READY STUDENT TO HEALTHCARE PROFESSIONAL

Ms Jana Chan graduated from SIT with a degree in Occupational Therapy in 2021 and completed her Integrated Work Study Programme (IWSP) with MOH Holdings. Her mentor, Ms Evelyn Kong has guided her since she joined Tan Tock Seng Hospital (TTSH).

As a teaching hospital, TTSH provides students with first-hand experience in the patient's care team, allowing them to work closely within the healthcare team for improved patient outcomes. This collaborative effort prepares students for multi-disciplinary healthcare work environments.

SIT's specialised degree programmes are built on such industry collaborations. The University's applied learning and research approach aims to maximise the potential of students and help them navigate an ever-changing work environment.

(From left) Ms Jana Chan, Occupational Therapist and SIT graduate with mentor, Ms Evelyn Kong, Senior Occupational Therapist at Tan Tock Seng Hospital.

"It was a pleasure to mentor Jana when she joined us as an Occupational Therapist. Her strong foundation in clinical concepts coupled with the ample hands-on experience she gained from the practical lab sessions and clinical practice at SIT allowed her to assume her work responsibilities easily."

MS EVELYN KONG

Senior Occupational Therapist
Tan Tock Seng Hospital

COMMUNITY

Pursuing a degree is just one aspect of every SITizen's journey at SIT. Another part of the University's mission is also to equip our students with the right knowledge, skills, and ethos to serve the community around them. Throughout the year, students, faculty, and staff at SIT were actively involved in meaningful collaborations to benefit the social, economic, or environmental aspects of the community.

SIT COMMUNITY CHALLENGE 2021

The annual SIT Community Challenge 'A Graceful Ageing Community for the Elderly' was organised by SIT together with James Dyson Foundation (JDF) and Greendale Secondary School. The Challenge involved five faculty members and seven student mentors who used their design thinking skills to guide 320 Greendale Secondary 2 students to ideate and propose creative solutions. JDF also conducted an exclusive prototyping workshop for SIT student mentors, who were able to apply design thinking and prototyping skills to help Greendale students refine their ideas and prototypes.

SIT faculty and student mentors guiding Greendale Secondary School students to come up with creative solutions. (Photo courtesy of Dyson Foundation)

INTELLIGENT READING APP FOR AWWA CHILDREN WITH SPECIAL NEEDS

The Centre for Communication Skills at SIT is leading a collaboration with faculty from the Infocomm Technlogy and Health and Social Sciences clusters to develop an intelligent reading app. The app is specially designed for children with special needs who are under the care of the Asian Women's Welfare Association (AWWA). The personalised learning app offers children's stories pegged at three ability levels and contextualised in familiar local settings such as HDB void decks and hawker centres, so children can easily relate to them.

The app provides individualised diagnostic assessments of children's receptive vocabulary development and reading comprehension. It can also record children's dictations of the stories, allowing speech therapists to monitor the development of the children's grasp of articulatory phonetics. At present, the project team is developing a proof-of-concept for a major research grant application.

LAUNCH OF ONE-REHAB FRAMEWORK WORKSHOPS

Announced in March 2021 at the Ministry of Health (MOH) Committee of Supply Debate, the One-Rehab Framework aims to ensure patients have timely access to the right level of rehabilitation care in the community. Led by SIT's Health and Social Sciences faculty, A/Prof Kwah Li Khim, A/Prof Ong Peck Hoon, and A/Prof Valerie Lim, the One-Rehab Framework workshops were administered by SIT*LEARN* Professional Development. In FY2021, more than 1,200 healthcare professionals were trained. This collaboration puts SIT at the forefront of addressing the nation's needs. It ensures that healthcare professionals have a common avenue for collaboration to learn best practices to provide improved rehabilitation treatments for patients.

TECH FOR GOOD 2021

SIT partnered Engineering Good to co-produce Tech for Good 2021, an innovation challenge where youths produced technical or digital solutions that can create a positive social impact on persons with disabilities. Three teams – SIT UP, CAAN, and AHMLX – made up of 14 students from the SIT ICT (Software Engineering) and Computer Engineering programmes were among the 40 finalists. SITizen Ambassadors and faculty also participated in the event as team mentors, workshop speakers, emcees, and judges.
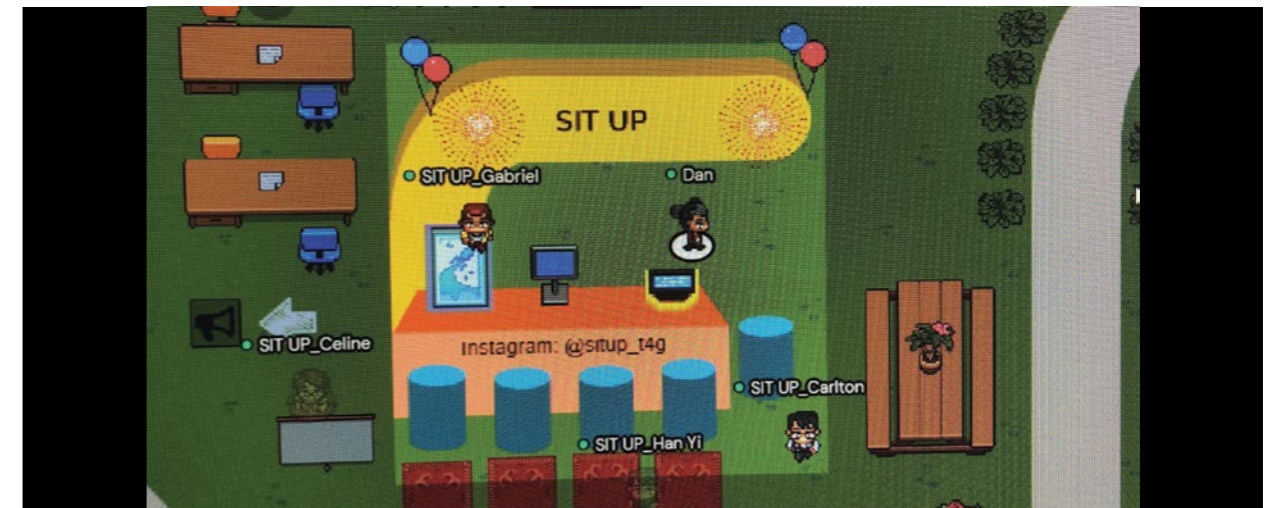
Team SIT UP's Independence Empowerment project booth on Gather.Town.
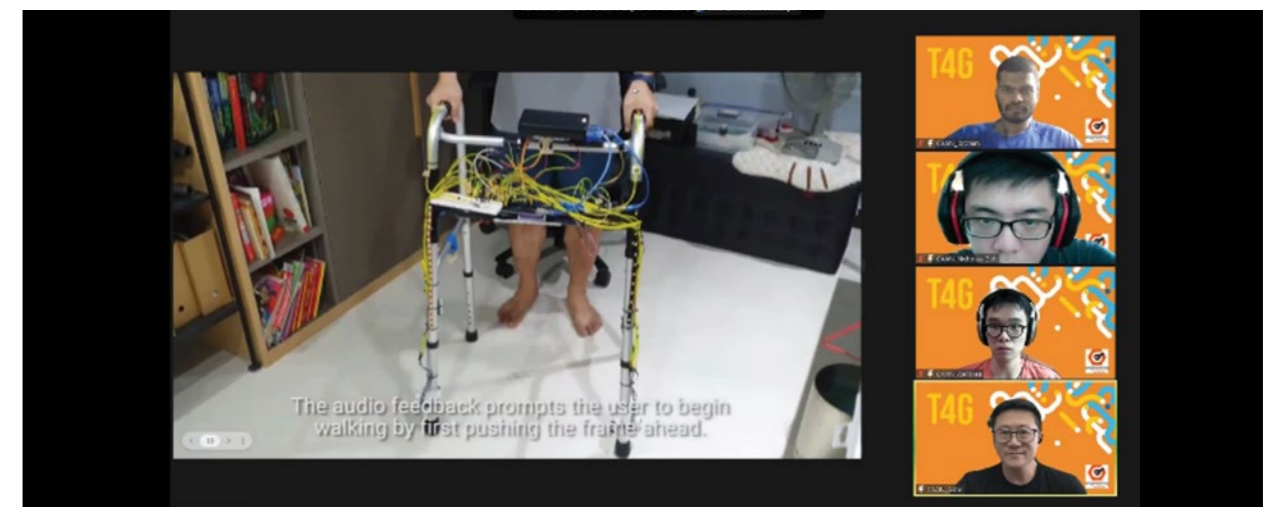
Team CAAN's presentation of their walking aid project.

DESIGN OF NEA RECYCLING RECEPTACLE

Households in Singapore may soon have a recycling receptacle designed by SIT students. In 2021, the **National Environment Agency (NEA)** approached the **Community Leadership and Social Innovation Centre (CLASIC)** at SIT, inviting students to propose designs for a low cost, foldable, expandable, sturdy, and waterproof recycling receptacle that can hold common recyclable items. CLASIC subsequently formed a project team and awarded a grant to a Senior Professional Officer who mentored SIT students to develop six designs in accordance with NEA's specifications. The team presented their prototypes to NEA in September 2021 and NEA decided to adopt one of the designs.

NEA representatives joined CLASIC and the project team to check out the receptacle designs.

Project team members worked on the prototypes in RaPID laboratory at SIT@Dover.

NEA, CLASIC, and project team representatives at the CLASIC Project Sharing Seminar held on 25 November 2021 at SIT@Dover.

STUDENT RELIEF FUND@SIT (COVID-19)

SIT strives to provide opportunities for all its students. To support SIT undergraduates who faced financial hardships during the COVID-19 pandemic, the Student Relief Fund@SIT (COVID-19) was established with the help of generous contributions from the University's philanthropic partners. The Fund was made available throughout the year to provide financial support to current and graduating students. As at 31 March, 1,354 grants of up to $2,000 were awarded to eligible SITizens since the Fund was established.

BUILDING EMPLOYEE ENGAGEMENT AND ADVOCATING WELLNESS

Our staff and faculty form the bedrock of the university. Providing avenues for our staff to renew their links to industry and keep their pulse on the latest trends is important to SIT as a university of applied learning.

The **External Work Engagement System** was improved, so that faculty and staff could spend less time on administrative matters and devote more time to value-adding and co-creating innovative projects. The system was developed to encourage faculty to participate in external engagements with industry and stay abreast of the latest developments in their professional fields.

Enhances the organisation's linkages with industry

Support staff's unique expertise and standing as industry experts

Quick resolution of queries while ensuring good data governance and compliance

More than 2,000 requests received since Oct 2021 launch

The **Ask HR! Helpdesk** was launched to provide SIT staff with a centralised channel for all HR queries and requests. Since its launch in October 2021, more than 2,000 requests have been received and more than 80% of them were resolved within the targeted three working days.

On the staff wellness front, the **Employee Wellness Committee (EWC)** organised a series of activities to keep our staff's mental and physical states in optimal condition. The Health Promotion Board's National Steps Challenge and Yellow Ribbon Virtual Run were two initiatives to promote physical activity and bonding amidst the remote working arrangements. SIT staff came together as ONE SIT during the **Virtual Staff Party 2021** and had a fun time as bounty hunters. A highlight of the staff party was a special video montage put together by the organising committee that took Prof Tan Thiam Soon, Institute Professor, on a pleasant trip down memory lane.
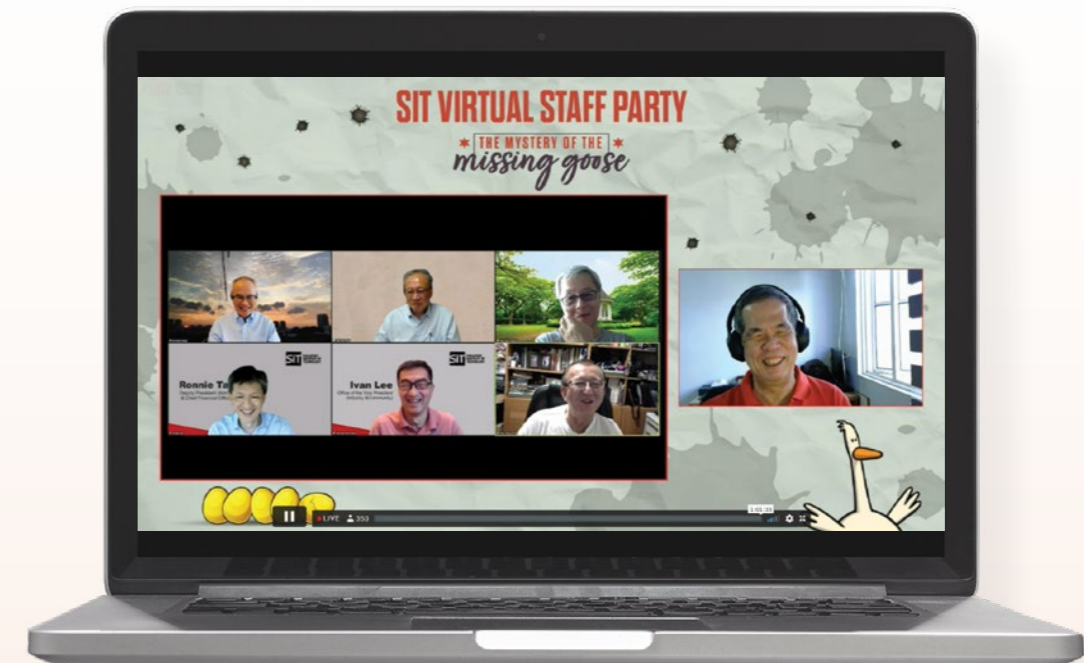
A DIGITALLY TRANSFORMED UNIVERSITY

The University periodically invests in new and emerging technologies to enhance its digitalisation efforts. The past two years have seen an accelerated adoption of digital trends as we adjusted to new modes of work and safe management measures.

DIGITAL VIDEOCONFERENCING SOLUTIONS FOR HYBRID MEETINGS

SIT's Communications and Information Technology (CIT) team has implemented digital videoconferencing solutions to 20 meeting rooms in SIT campuses in 2021 to enable hybrid meetings, where participants may choose to attend the meeting in person or remotely. The solution is effective and easy to use due to smart features such as a camera that is able to track the speaker while capturing his/her voice clearly.

E-SYSTEMS FOR FINANCE MATTERS

SIT launched the Finance e-Invoicing System and e-Goods Receipt (eGR) System. This system leverages the latest Optical Character Recognition (OCR) and machine learning technologies to improve efficiency and accuracy in processing the voluminous invoices at SIT. It also supports the nationwide e-Invoicing initiative 'Invoice Now' spearheaded by IMDA, using the PEPPOL (Pan European Public Procurement Online) electronic data interchange standards. The eGR System helps to digitise, streamline, and improve the GR submission process and users' experience. Overall, these have enhanced the efficiency of the procure-to-pay process in SIT.
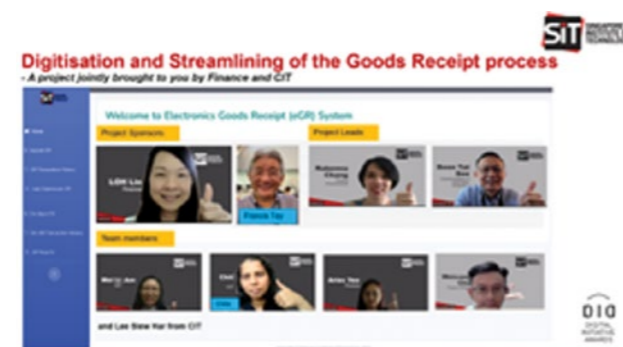
DIGITAL BUILDING TWIN

Imagine being able to create digital twins of entire buildings at the click of a button. The d.ASH Autonomous Robot Digital Scanning solution makes this possible, opening doors to leverage the SIT campus as a living lab for applied research, innovation, and more. This is part of an ongoing applied research collaboration between SIT and local start-up dConstruct Technologies. The outcome is a coloured 3D point cloud that has been scanned, stitched, merged, and aligned automatically, ready to use in any construction or digital twin application.

Photo courtesy of dConstruct Technologies

EXPANDING FACIAL RECOGNITION CAPABILITIES

Following the successful implementation of Facial Recognition (FR) Technologies for the authenticated library loan service, SIT expanded FR capabilities to overcome COVID-19 safeguards. FR was trialled for use in attendance-taking during examinations (physical and virtual) as well as in support of contact tracing. The FR technologies proved to be an overwhelming success with an accuracy of 80% under mask-on conditions.

SIT DATA CLASSIFICATION AND PROTECTION

As part of our data governance safeguards, SIT launched the Microsoft Azure Information protection (AIP) software tool with the Microsoft Azure Information Protection (AIP) software tool, alongside the revised Data Classification Policy, to automate the tasks of data labelling, classification, and protection of SIT emails and documents. This reduces the organisation's risk of accidental disclosure of sensitive data, thereby increasing the level of security and protection of SIT emails and documents.

SECURITY ROBOT PATROL WITHIN THE CAMPUS

The SIT Estates team explored the possibility of using technology to support security operations within the campus. This would not only reduce the demand for tight security personnel resources in industry but also reduce the need for security officers to carry out routine tasks. Instead, they would be allowed to focus on duties that require a higher level of attention, such as monitoring the surveillance and alarm systems, as well as responding to emergencies.

A proof-of-concept (POC) study was conducted on the use of robots to carry out autonomous security patrol duties within the campus. The surveillance camera system installed in the robot transmitted images of its surroundings back to the control room, where they were monitored by the security supervisor. The POC enabled the team to assess how technology could be better integrated into its security operations for future deployment at the upcoming Punggol Campus.

Cruzr   MPE   Oscar   Xavier

Security robots on patrol on campus.

UNMANNED CONVENIENCE STORE

To enhance campus services to staff and students, convenience store operator, Cheers, set up an unmanned convenience store employing Artificial Intelligence (AI) technology. The store, located in SIT@Dover, commenced operations in March 2022. With this technology, customers now enjoy the convenience of not having to queue and pay at the counter for their purchases. Upon installing the Cheers application on their mobile devices with a registered credit or debit card, customers can just pick up what they want and walk out of the store.

AI CHATBOT FOR ADMISSIONS INTERVIEWS

SIT piloted an Artificial Intelligence (AI) chatbot during the AY2021 Admissions Exercise for two Infocomm Technology programmes. The AI chatbot supported chat-based interviews that can be customised to different needs and provided a structured assessment for the applicants. More than 600 applicants undertook the new chatbot assessment in parallel with an online video assessment for the Software Engineering and Information Security degree programmes. To authenticate the identity of the applicant taking the assessment, the cross-divisional team (comprising ICT faculty, staff from Admissions and CoDE divisions) incorporated a proctoring tool for authentication, as well as weaved in a video component for a comprehensive and seamless assessment approach in the Admissions Exercise in AY2022.

High completion rate of almost 100% by applicants

Time savings as compared to doing in-person interviews

Novel and positive experience for prospective students

DIGITAL INITIATIVE AWARD

Our staff and students have been quick to embrace digital adoption. This is evident in the increased number of entries for the Digital Initiative Award (DIA) 2022. Established in FY2019, the DIA showcases digital innovations by staff that will benefit the university and kickstart positive process changes. A total of 23 submissions were received this year in both team and individual categories. Teams that demonstrated effective cost savings in overall operational expenditures through their projects were lauded under the Economy Drive Award.

SUSTAINABILITY EFFORTS

SIT'S SUSTAINABILITY STRATEGY

SIT aims to develop sustainability talent, ensure a sustainable future for SIT, and contribute to Singapore's sustainability goals.

3 SUSTAINABILITY THRUSTS

Our sustainability efforts are driven through 3 Sustainability Thrusts: Sustainable Campus, Sustainability Research & Innovation, and Development of Sustainability Talent.

Sustainability Workgroups

Each thrust is under the purview of workgroups each chaired by Senior Management members to drive SIT's Sustainability Strategy.

SUSTAINABLE RESEARCH & INNOVATION
Vice President (Industry & Community)

- Developing innovative capabilities and solutions for industry and community that support Singapore's sustainability goals

SUSTAINABLE CAMPUS
Deputy President (Administration) & Chief Financial Officer and Vice President (Planning)

- Ensuring sustainability in SIT's policies, practices and operations
- Inculcating strong sustainability values and practices among our staff and students

DEVELOPMENT OF SUSTAINABILITY TALENT
Deputy President (Academic) & Provost

- Producing graduates who can secure new jobs in sustainability as well as contribute to strengthening sustainability in industry sectors

SUSTAINABILITY EFFORTS IN FY2021

WORKSHOP ON GROWING YOUR OWN FOOD

During this workshop led by SIT's sustainability-related student club, Action for Environment Conservation (AEC), 81 students and staff learnt how to build a self-watering planter with household materials and seeds.

Keesha Tan, a representative of SIT's AEC student club, briefed on the materials required to build a self-watering planter.

WORLD ENVIRONMENT DAY

SIT organised a set of activities to mark World Environment Day, which aimed to raise awareness among its staff and students on the importance of environmental sustainability.

Themed 'Sustainability Starts With You', staff and students attended virtual talks and upcycling workshops to learn actions and habits they could adopt to be more environmentally-friendly.

Talk: How to be a Conscious Consumer, where Jo Tang, Founder of The Sustainability Project, explained the 5Rs under the zero waste hierarchy.

Workshops: Upcycled Beverage Carton Mask Holder, Upcycled Fabric Yarn Coaster Mat, Upcycled T-shirt Tote Bag.

R.I.S.E. TO THE CHALLENGE

To kickstart the new year, the Sustainability Workgroup co-organised 'R.I.S.E. to the Challenge' from 10 to 18 January 2022 in collaboration with Terra SG and ALBA. The series of events culminated in the ALBA E-Waste talk as well as the 'R.I.S.E. to the Challenge' exhibition, which made its rounds at all SIT campuses.

Attendees at the ALBA E-Waste Talk at SIT@Dover.

(**FEB 2022**)

### NEA'S 'READY, SET, RECYCLE!' COMPETITION

From 18 February to 11 March 2022, SIT participated in a competition for institutes of higher learning as part of the National Environment Agency (NEA)'s 'Recycle Right' campaign, encouraging students to compete in online activities and learn to recycle right.

(**MAR 2022**)

SINGAPORE WORLD WATER DAY

SIT joined in **#GoBlue4SG2022** by lighting up its façade in blue and promoting water conservation through emails and digital displays. In addition, to raise awareness among our students and colleagues of the importance of water conservation, the Sustainability Workgroup organised a visit to **NEWater Visitor Centre**, where participants learnt more about the water recycling and treatment cycle in Singapore and the impact of water sustainability in Singapore due to climate change.
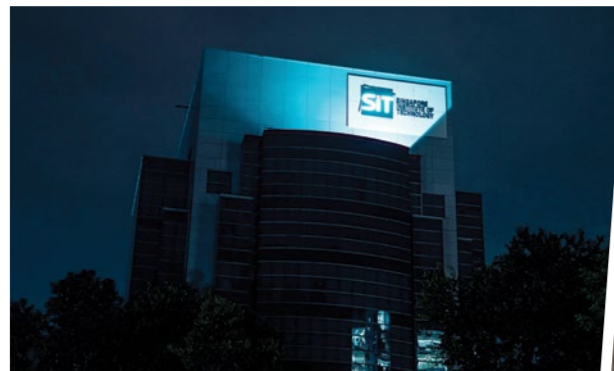
SIT@Dover was lit up in blue on 22 March.

SIT students and staff visited the Deep Tunnel Sewerage System (DTSS) at NEWater Visitor Centre.

BUILDING A SUSTAINABLE CAMPUS

The SIT campus in Punggol is currently undergoing construction. However, the groundwork for sustainability is already being laid.

Mr Chan Wing Leong (8th from left), Deputy President (Campus Development) and Chief Investment Officer and Mr Gerry Wee (9th from left), Director, Estates, at the ABC Waters award ceremony with Dr Amy Khor (7th from left), Senior Minister of State for Sustainability and the Environment and other awards recipients. (Photo courtesy of Public Utilities Board)

AWARDS FOR DEVELOPMENT

SIT received the highest accolade – ABC Waters Certified (Gold) Award – at the Active Beautiful Clean (ABC) Waters Seminar 2022 for its planned design features in its upcoming Punggol Campus East and West Zones. These features, including detention eco-ponds, rain gardens, and cleansing biotopes, are part of the University's rain harvesting and sustainable stormwater management efforts, and will be seamlessly integrated into the campus to provide a scenic backdrop for the SIT community.

In addition, SIT also attained the BCA Universal Design (UD) Mark GoldPLUS (Design) Award in recognition of its adoption of a user-centric philosophy in its design, operations, and maintenance.

REDUCING CARBON FOOTPRINT WITH RENEWABLE ENERGY

All SIT buildings in our Punggol Campus will meet BCA Green Mark Platinum standards, with two in particular slated to achieve Super Low Energy status. One prominent green feature of the campus will be the Multi-Energy Microgrid (MEMG). The MEMG will be equipped with low carbon technology of various photovoltaics (PV) systems such as Roof-top PV, Building-Integrated PV and PV Thermal, which can convert sunlight to electricity. The MEMG design also allows for different building management systems to be tested and deployed for islanding of buildings (nanogrid) and certain floors (picogrid) from the national grid, as well as a hybrid alternating current/direct current (AC/DC) grid at the ICT Primary and Secondary Server Rooms within the building.

Pico grid including energy storage system

Photovoltaic thermal system

Rooftop solar photovoltaic system

DC grid with energy storage system

Building-integrated photovoltaics

Electric vehicle charging station

A feature pond with lush landscaping greets visitors at the main entrance to SIT Punggol Campus (East Zone).

AIR-PURIFICATION SYSTEM

The health of our students, staff, and visitors is important to SIT. Our Punggol Campus will be equipped with an air-purification system (APS) to provide clean indoor air campus-wide in the event of haze and pandemic outbreaks. The APS can effectively screen out viruses and bacteria in the air to significantly reduce the risk of disease transmission, as well as improve indoor air quality.

INTEGRATED BUILDING AND SECURITY MANAGEMENT SYSTEMS

In facilities management operations, the Estates team is building an Integrated Building Management System (IBMS) and Integrated Security Management System (ISMS) to manage operations in the future 9-ha Punggol Campus. The IBMS allows all building systems to be connected seamlessly through the Internet of Things (IoT) technology to optimise the physical environment, enhance campus experience, and workspace efficiency. The ISMS centralises security operations and aims to optimise manpower resources on-site.

"Our team worked with Metro Farm Pte Ltd on an intelligent and sustainable aquaponics farming system that leverages emerging technologies. The high-tech and high-yield aquaponics is located at NTUC Downtown East, Singapore. Through this collaboration, we can contribute to Singapore's food security and sustainability."

ASSOCIATE PROFESSOR ANDREW NG
Programme Leader, Master of Engineering Technology in Sustainable Infrastructure Engineering (Land), SIT

GROWING BEYOND THE LAB TO THE MARKETPLACE

Home-grown company Metro Farm Pte Ltd specialises in aquaponics IOT farming systems and aims to increase domestic food production to enhance Singapore's food security. It provides a wide range of aquaponics solutions for satellite commercial farming systems that can be deployed in any size and location.

(From left) A/Prof Andrew Ng and Mr Chris Toh, Co-founder and Director of Metro Farm Pte Ltd at one of Metro Farm's satellite commercial aquaponics rooftop IOT farms in Bendemeer.

"We're excited to partner SIT to contribute towards one of the key targets of the Singapore 2030 Green Plan, which is to meet 30% of Singapore's nutritional needs through locally-produced food. The collaboration has been fruitful and we have benefitted from the expertise of SIT's faculty."

MR CHRIS TOH
Co-founder and Director Metro Farm Pte Ltd

SUPPORT FOR STUDENTS

SIT strives to ensure that deserving students will never be deprived of a quality education because of financial difficulties. We offer an extensive range of financial assistance to help students with their tuition fees and expenses.

SPONSORSHIPS AND BONDED SCHOLARSHIPS

Thanks to the generous contributions of industry partners, government agencies, and organisations, our students can benefit from various forms of sponsorships and bonded scholarships.

ACKNOWLEDGEMENTS

Alexandra Health	**Ministry of Defence**
Ang Mo Kio Thye Hua Kwan Hospital	**Ministry of Education**
Association of Singapore Marine Industries	**Ministry of Home Affairs**
AWWA Ltd	**National Kidney Foundation**
Changi General Hospital	**NTUC Health**
Centre for Strategic Infocomm Technologies	**OCBC Bank**
Ensign Infosecurity	**Overseas Union Enterprise**
Infocomm Media Development Authority	**Parkway Pantai**
JUMBO Group	**Public Utilities Board**
Kwong Wai Shiu Hospital	**Rainbow Centre**
Land Transport Authority	**Ren Ci Hospital**

SATS Ltd	**St Luke's Eldercare**
SBS Transit	**St Luke's Hospital**
Sengkang General Hospital	**SystemEngineer360 Pte Ltd**
Singapore General Hospital	**Tan Tock Seng Hospital**
SMRT Corporation Ltd	**The Salvation Army**
Society for the Physically Disabled	**Thye Hua Kwan Moral Charities Limited**
St Andrew's Community Hospital	**Woodlands Health Campus**
ST Engineering	

IN APPRECIATION OF
SIT'S DONORS

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2022

Their impactful giving nurtures our students through non-bonded bursaries, grants, scholarships and excellence awards, while enabling us to strengthen applied learning and drive industry innovation and transformation through applied research.

AbbVie Operations Singapore Pte Ltd

Mr John Abraham

Abwin Pte Ltd

Aegis Building & Engineering Pte Ltd

Aeris Dynamics Pte Ltd

Aero Inspection Asia Pte Ltd

Aerospace Consultancy Pte Ltd

Alfa Tech Vestasia Pte Ltd

Allgrace Investment Management Pte Ltd

Amazon Automation Pte Ltd

Amazon Web Services Singapore Private Limited

Dr Ang Poon Liat

Applied Materials South East Asia Pte Ltd

ARIS Integrated Medical Pte Ltd

Ascendas Funds Management (S) Limited

Ashland Singapore Pte Ltd

AsiaCloud Solutions Pte Ltd

Association of Consulting Engineers Singapore

Athena Dynamics Pte Ltd

Azalea Investment Management Pte. Ltd.

Baker Tilly

Blu5 Group

Mr Boey Jun Hoe, Martin (Mei Junhao)

BR Metals Pte Ltd

Bushiroad International Pte Ltd

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Canary Intelligence Pte Ltd

Canon Medical Systems Asia Pte. Ltd.

CASY Engineering Consultancy Pte Ltd

CBJ Foundation through The Community Foundation of Singapore

CEI Limited

Centre for Strategic Infocomm Technologies (CSIT)

Changi Airport Group

Mr Chau Shing Chi

Ms Chen Teck Shing

Chop Wah On

Mr Choo Chiau Beng

Mr Choo Chong Ngen

Chua Foundation

Conrac Asia Display Products Pte Ltd

Continental Automotive Singapore Pte Ltd

Core Concepts Pte Ltd

CPA Australia Ltd

Cybersprout Pte Ltd

Cyclect Electrical Engineering Pte Ltd

Mr Vaibhavkumar Sudhir Dabhade

DBS Bank Ltd

Decision Science Agency Pte Ltd

Dell Global B.V. Singapore Branch

Deloitte & Touche LLP

Diana Koh Foundation through The Community Foundation of Singapore

Dou Yee Enterprises (S) Pte Ltd

ENGIE Services Singapore Pte Ltd

EnGro Corporation Limited

EPS Computer Systems Pte Ltd

Estate of Irene Tan Liang Kheng

EY

Family of Loo Shaw Chang & Tan Hooi Hong

Family of Mr Ng Sheng Poh and Mdm Quek Siew Keow

Far East Organization

finexis advisory Pte Ltd

Ms Rosalind Fok

Foo Kon Tan LLP

Furama Pte Ltd

Garena Online Private Limited

General Filter Pte Ltd

Geo Energy Group

GIC Private Limited

GlaxoSmithKline – EDB HRD Fund

Mr Jeff Goh

Goh Bee Gah Foundation through SymAsia Foundation Limited

Goh Foundation Limited

Goldbell Financial Services Pte Ltd

Grow-Tech Properties Pte Ltd

Harrier Technology Pte Ltd

Hiap Chuan Hardware (Pte) Ltd

Ho Bee Land

Mr Ho Yee Yang Edmond

Hock Seng Hoe Metal Co. Pte Ltd

Hummingbird Health Pte Ltd

IES-IStructE Joint Committee, The Institution of Engineers, Singapore

IGG Singapore Pte Ltd

Info-Communications Media Development Authority of Singapore (IMDA)

Ingredion Singapore Pte Ltd

Institute of Chemical and Engineering Sciences (ICES)

Institute of Materials (East Asia)

Institute of Singapore Chartered Accountants (ISCA)

Interlocal Exim Pte Ltd

ITSEC Services Asia Pte Ltd

JCS-Echigo Pte Ltd

Mr Surya Jhunjhnuwala and Mr Gaurang Jhunjhnuwala

JM Vistec System Pte Ltd

Kaspersky Lab Singapore Pte Ltd

Kat Cat Pte Ltd

KCTex International Ltd

Mr Kee Sek Huat

Keppel Care Foundation Limited

Keppel Corporation Limited

Khoo Chwee Neo Foundation Ltd

Kimly Construction Pte Ltd

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KRISfam Fund through The Community Foundation of Singapore

KSF Beverage Holding Foundation through The Community Foundation of Singapore

Kuang Yong Auto

Mr Kuok Khoon Hong

Kwai Fong & Raymond Goh

Land Transport Authority of Singapore (LTA)

Mr Lam Yi Young & Family

Ms Amanda Lau

Learning Access Foundation

Lee Foundation

Mr Lee Kok Keong and Ms Goh Ling Ling Serene

Ms Karen Lee Yun Fun

Mr Patrick Lee

Leo Infocomm Pte Ltd

Er. Leong Kwok Kee Stephen

Lew Foundation

Mr Eddie Li Hung

Mr Kevin Liang

Mr Lien Ber Luen

Lih Ming Construction Pte Ltd

Mr Peter Lim

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Mr Lim Daoyi, Moses and Mrs Lee Wen Wen Sandra Jean

Mr Lim Joo Boon

Mr Lim Peng Hun and Ms Vanisa Lee

Mr Lim Siah Mong

Mr Lim Sze Wee

Lions Community Service Foundation (Singapore)

Lo Hock Ling & Co

Ms Loh Lin

Mr Loo Tze Kian

Ms Low Geok Cheng

Mr Low Ming Wah

Loyang Tua Pek Kong

Mr LU Kee Hong and Ms Chan Haw Ngee

Mr Lum Kok Keong Richard

L-QuBE Pte Ltd

LSK Engineering (S) Pte Ltd

LTC (RET) Chan Chik Weng and Mdm Chong Chow Hah

M.Tech Products Pte Ltd

Mr Malaichamy Mani

Mapletree Investments Pte Ltd

Marina Bay Sands Pte Ltd

Mdm Julie Teo Lee Meng

Mdm Thng Poh Choo

MHC Medical Network Pte Ltd

Mighty Jaxx International Pte Ltd

Mitsubishi Electric Asia Pte Ltd

Mount Alvernia Hospital

Naterra Resources International Pte Ltd

National Council of Social Service

National Healthcare Group Pte Ltd

Nebulas Tree Pte Ltd

Nehemiah Foundation through SymAsia Foundation Limited

NetLink Management Pte Ltd (as trustee of NetLink Trust)

Net-Source Group Pte Ltd

Nexia TS Pte Ltd

NING Research Pte Ltd

Nippon Express (Singapore) Pte Ltd

Ocean Tankers Pte Ltd

Octava Foundation Limited

Ohm Energy Pte Ltd

Ms Sabrina Ong Geok Khim

Dr Ong Kiem Kiok

OUE Limited

Pan Pacific Hotels and Resorts Pte Ltd

Pan Pacific Hotels Group Ltd operating as PARKROYAL on Beach Road

Parkroyal Kitchener Hotel Pte Ltd

Parsing Pte Ltd

Paul Wong AICM Pte Ltd

Pei Hwa Foundation Limited

Petrochemical Corporation of Singapore (Private) Limited

PKF-CAP LLP

Mr Ajit Aravind Prabhu

Prima Limited

Prudential Assurance Company Singapore (Pte) Limited

Q'son Kitchen Equipment Pte Ltd

Quantum Inventions Pte Ltd

Racks Central Pte Ltd

Raffles Hotel Singapore

Rohde & Schwarz Asia Pte Ltd

Rotary Club of Bugis Junction, Singapore

Rotary Club of Jurong Town, Singapore

Rotary Club of Tanglin, Singapore

RSM Chio Lim LLP

S M Jaleel Foundation

S.S. Jhunjhnuwala Charity Fund

Samwoh Corporation Pte Ltd

SBF Foundation

SBS Transit Ltd

SCAL Resources Pte Ltd and members of The Singapore Contractors Association Ltd

Seagift Food Pte Ltd

Select Group Pte Ltd

Sheng Siong Group

Siemens Pte Ltd

Singapore Accountancy Commission

Singapore Buddhist Youth Mission

Singapore Chemical Industry Council Limited (SCIC)

Singapore Chinese Chamber Of Commerce Foundation (SCCCF)

Singapore Computer Society

Singapore Concrete Institute

Singapore Food Manufacturers' Association (SFMA)

Singapore Green Building Council

Singapore Heart Foundation

Singapore Leong Khay Huay Kuan

Singapore Nurses Association

Singapore Society of Radiographers

Singapore Sports Council

Singapore Teochew Foundation

Dr Siti Noorbaiyah Binti Abdul Malek

SIT Health and Social Sciences (HSS) Cluster Faculty and Dr Alex Wirianski

SMRT Corporation Ltd

Mr Soon Sze Meng

SP Group

Sprinkler Fire Systems Pte Ltd

ST Engineering IHQ Pte Ltd

St Luke's ElderCare Ltd.

Steelaris Pte Ltd

Straits Bunkering Pte Ltd

Straits Construction Singapore Pte Ltd

Super Bean International Pte Ltd

SYNthesize Pte Ltd

SystemEngineer360 Pte Ltd

T T J Design And Engineering Pte Ltd

T.E Engineering & Trading

Tai Tak Estates Sdn Bhd

TAK Products & Services Pte Ltd

Talentsis Pte Ltd

Tan and Neo Family

Ms Angela Tan Guat Hoon

Tan Si Rong

Mrs Yi-Lin Tan and Mr Foong Sheng-Wei

Mr Gabriel Tan Yong Kai

Mr Tan Yong Hui James

Taylor & Francis Asia Pacific

Temasek Foundation

Temasek Holdings Pte Ltd

Mr and Mrs Teo Hock Chuan

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The Estate of Chong Yook Yin

The Estate of Eng Liat Kiang (Deceased)

The Estate of Lim Doa Hin (Deceased)

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The Ireland Funds (Singapore)

The Masonic Charitable Fund

The Mohan Family

The Ngee Ann Kongsi

The Polyolefin Company (Singapore) Pte Ltd

The Silent Foundation Ltd

The Tan Chin Tuan Foundation

Thomson Shin Min Foundation

Tiong Seng Contractors (Private) Ltd

TL Whang Foundation Limited

TME Systems Pte Ltd

Mr Toe Teow Heng

Dr Toh See Kiat

Mr Benjamin Toh Tsui Chuan

Mr Tong Kok Chiang and Mdm Thng Poh Choo

Tong Seng Produce Pte Ltd

Tote Board

Tractors Singapore Limited

Dr Paul Tseng

Tseng Family Foundation through The Community Foundation of Singapore

Tunnelling and Underground Construction Society (Singapore) (TUCSS)

Tyco Electronics Singapore Pte Ltd

United Overseas Bank Limited

Utoc (Singapore) Pte Ltd

Mr Mohan K Vaswani

Mr Wee Siew Kim

Wilmar International Limited

Woh Hup Pte Ltd

Mr Albert Wong

Mrs Wong Kwok Leong

Dr Steven Wong Kai Juan

Ms Wong Kai Yun

Ms Angela Wu Peihui

X-Inc

Yangzheng Foundation

Dr Alvin Yeo

YP Academy Pte Ltd

Mr Yusof Bin Amir Wahid

Z L Construction Pte Ltd and Mr Jake Yeoh

CORPORATE GOVERNANCE

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2022*

INTRODUCTION

SIT was incorporated in September 2009 as a company limited by guarantee under the Companies Act 1967. It is an Institution of Public Character ("IPC") under the Charities Act 1994.

SIT is governed by the Singapore Institute of Technology Act 2014. Its key constituent document is the Memorandum and Articles of Association which states that the purpose of the University is to promote and undertake the advancement of education by providing educational facilities and courses of study in all fields of knowledge, promote and engage in research and scholarships and establish, operate, promote and maintain the University as a going concern. SIT has three subsidiaries – Verbosecurity Pte. Ltd. (Company Registration No. 201902376G), which was incorporated on 18 January 2019; SIT Microgrid Pte. Ltd. (Company Registration No. 201926986H), which was incorporated on 19 August 2019; and Foodplant Pte. Ltd. (Company Registration No. 202007139N), which was incorporated on 2 March 2020. The three subsidiaries were incorporated to support SIT's strategic initiatives.

Good corporate governance is the cornerstone of a well-managed University which is, in turn, critical to SIT's performance and operations. The focus of its governance framework, on which the University's vision, mission and core values are formulated, promotes accountability and transparency and is manifested in the composition of the Board of Trustees ("**Board**") and its Committees, division of powers and duties between the Board and Management, adoption of checks and balances, and sound measures for internal and corporate controls.

GOVERNANCE EVALUATION CHECKLIST

The University adheres to the Code of Governance for Charities and Institutions of Public Character ("**Code**"). The University has complied in material aspects with the principles and guidelines set out in the Code. Where there are departures from the Code, these are explained under the relevant sections of the Governance Evaluation Checklist ("**GEC**").

According to disclosure requirements imposed by the Charity Council, Ministry of Culture, Community and Youth, all IPCs are required to publicly disclose their compliance with the Code. The University's GEC is made available on the website of the Charity Portal at www.charities.gov.sg.

BOARD OF TRUSTEES

The Board is the highest governing authority of the University and comprises 20 Trustees, chaired by Mr Bill Chang, Chief Executive Officer, Group Enterprise / Chief Executive Officer, Regional Data Centre Business, Singapore Telecommunications Ltd. The Board oversees the business of the University, ensures that it acts in accordance with its objects, that its funds and assets are properly accounted for and safeguarded and provides guidance and stewardship to Senior Management, conferring regularly with them.

The Board is accountable to the Minister for Education, Singapore for its acts and decisions.

The Trustees are eminent persons of good repute and sound judgment who possess collective competencies in areas such as the public and private sectors, academia, accounting and finance, law, information technology, strategic planning, engineering, defence, investment and asset management, healthcare, real estate, and sustainability. New Trustees will continue to be selected and invited to serve on the Board on the basis of the diversity of their experience, skills, knowledge, abilities and insight from time to time to ensure constant refreshing of the Board. The Trustees' profiles appear on pages 10 and 11 of the Annual Report.

There is an objective decision-making process, which allows each Trustee to exercise his or her own independent judgment. The University has established financial authorisation and approval limits for operating and capital expenditure, the procurement of goods and services, the acquisition and disposal of assets and making investments. The Board approves the annual budget and annual audited financial statements of SIT, amongst other responsibilities. With regard to the reserves policy, the use of the reserves is subject to the approval of the Board. The Board is supported by seven Board Committees formed in accordance with Article 53 of the Articles of Association ("**AAs**"), namely the Audit, Campus Development, Finance, Industry and Research, Investment, Remuneration and Nomination, and Sustainability Committees. Each Board Committee has clear Terms of Reference setting out their role, authority, powers and matters requiring their approval. The list of Board Committees is on pages 64 and 65 of the Annual Report.

Briefly, the responsibilities of the Board Committees are as follows:

(a) The Audit Committee oversees and reviews the University's internal controls, integrity of its financial reporting, legal and regulatory risks, enterprise risk management, internal and external audit functions.

(b) The Campus Development Committee maintains oversight of the University's campus development policies and any other matters related to the acquisition, commissioning and management of significant physical assets or facilities.

(c) The Finance Committee provides oversight of the University's financial policy management.

(d) The Industry and Research Committee provides strategic guidance on the University industry engagement and collaboration and applied research.

(e) The Investment Committee oversees the investment of the University's endowment and surplus funds.

(f) The Remuneration and Nomination Committee oversees and reviews the University's overall remuneration framework and policies, and also oversees succession planning for the Board and the Board Committees.

(g) The Sustainability Committee provides strategic guidance on the University's sustainability strategy, policies and initiatives, as well as the development of the University's talent and applied research capabilities in sustainability.

Each Board Committee comprises Trustees with appropriate qualifications and skills and there is a fair distribution of responsibilities amongst the Trustees. Where required, non-Trustees with relevant areas of expertise are invited to provide advice to the Board Committees to enhance the process of decision making. The Board is kept informed of the key matters discussed at each Board Committee meeting.

None of the Trustees have general control and management of the University's subsidiaries.

BOARD ATTENDANCE

A total of four Board meetings were held during the financial year from 1 April 2021 to 31 March 2022. The attendance of the Trustees at the Board meetings during the financial year is tabulated below:

Name	Percentage (%) of Attendance
Mr Ng Yat Chung[1]	100
Mr Bill Chang	75
Mr Chan Hian Lim[2]	100
Dr Chia Tai Tee	100
Prof Chua Kee Chaing[3]	100
Prof Heng Chye Kiang[4]	100
Ms Melissa Khoo[4]	100
Dr Benjamin Koh	50
Mr Kwee Liong Keng	25
Ms Lim Wan Yong[5]	67
Mrs Margaret Lui	100
Mr Abu Bakar Bin Mohd Nor	75
Ms Neo Gim Huay[2]	67
Ms Gail Ong	100
Mr Quek Gim Pew	100
Mr Ravinder Singh	50
Mr Nagaraj Sivaram	100
Ms Susan Soh[2]	100
Mr Soon Sze Meng	75
Prof Tan Thiam Soon[6]	100
Ms Tammie Tham	100
Mr T K Udairam[4]	100
Mr Wen Khai Meng	100

NOTES

[1] Mr Ng Yat Chung who served for more than 10 years has broad experience and is an eminent leader who contributed significantly to SIT's growth and strategic direction. His appointment was endorsed by the Ministry of Education. Mr Ng ceased to be Chairman of the Board on 16 March 2022, before the financial year-end.
[2] Mr Chan Hian Lim, Ms Neo Gim Huay and Ms Susan Soh were appointed as Trustees of the Board on 16 September 2021.
[3] Prof Chua Kee Chaing was appointed as a Trustee of the Board on 1 January 2022.
[4] Prof Heng Chye Kiang, Ms Melissa Khoo and Mr T K Udairam ceased to be Trustees of the Board on 16 September 2021.
[5] Ms Lim Wan Yong was appointed as Trustee of the Board on 4 October 2021.
[6] Prof Tan Thiam Soon ceased to be a Trustee of the Board on 1 January 2022.
[7] Mr Han Kwee Juan and Ms Jacqueline Poh were appointed to the Board on 1 June 2022, after the financial year-end.

*Includes trustees appointed after 31 March 2022. Information correct as at Aug 2022.

MANAGEMENT OF THE UNIVERSITY

The President of the University, Prof Chua Kee Chaing, is appointed by the Board and is the Chief Executive Officer and the University's academic and administrative lead. He is responsible to the Board for the conduct, co-ordination and quality of the programmes of the University and its future development. He is empowered with the authority to perform all acts which are necessary to implement the policies, procedures and actions of the Board. As a liaison between the Board and the University, the President is tasked with the responsibility of informing each party of the views and concerns of the other that relate to the programmes and administration of the University. He also arranges for the annual budget of the University to be presented to the Board annually for approval as part of his duties.

The profiles of other members of the Senior Management of the University can be found on its corporate web page and on pages 8 and 9 of the Annual Report.

CONFLICTS OF INTEREST

The Trustees and staff are required to act in the best interest of the University at all times. Policies have been developed to prevent or manage situations where conflicts of interest could arise, by promoting integrity and ethical business conduct.

The AAs contain provisions for the management and avoidance of conflicts of interest by members of its Board of Trustees. Such provisions include:

(a) permitting a Trustee to be interested in any transaction with the University provided that the Trustee has declared the nature of the interest to the other Trustees of the Board as required under the Companies Act of Singapore and complied with the provisions of AAs to abstain from voting on any matter related to the transaction,

(b) permitting a Trustee, or a firm associated with the Trustee, to act in any professional capacity for the University and to be remunerated for the provision of professional services, and

(c) permitting a Trustee to be reimbursed for out-of-pocket expenses, travelling and other expenses properly incurred by the Trustee in attending and returning from meetings of the Board of Trustees, any of its committees, or any general meeting of the University or otherwise in connection with the affairs of the University.

The AAs also state that Trustees shall not receive any remuneration for services rendered by them as Trustees. In addition, the University does not have any staff receiving more than S$50,000 in annual remuneration that is a close relative of any Trustee.

The University has implemented a Conflicts of Interest Policy which all staff must comply with. In accordance with that Policy, staff must ensure that their private activities and interests do not conflict with their professional obligations to the University. Where there is a potential conflict of interest, the staff is required to submit full disclosure and request for an appropriate exemption. The University will grant such exemptions at its discretion. In addition, staff are required to declare their compliance with the University's prevailing policy on conflicts of interest annually.

BOARD COMMITTEES AND INTERNAL AUDIT

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2022*

BOARD COMMITTEES

Board Committee	Composition	
AUDIT COMMITTEE	**CHAIRMAN** Mr Nagaraj Sivaram	**MEMBERS** Dr Chia Tai Tee Dr Benjamin Koh Ms Gail Ong Mr Han Kwee Juan
CAMPUS DEVELOPMENT COMMITTEE	**CHAIRMAN** Mr Wen Khai Meng	**MEMBERS** Ms Neo Gim Huay Ms Gail Ong Ms Tammie Tham
FINANCE COMMITTEE	**CHAIRMAN** Mr Ravinder Singh	**MEMBERS** Mrs Margaret Lui Mr Wen Khai Meng
INDUSTRY AND RESEARCH COMMITTEE	**CHAIRMAN** Mr Abu Bakar Bin Mohd Nor	**MEMBERS** Mr Chan Hian Lim Mr Quek Gim Pew Ms Tammie Tham Ms Jacqueline Poh

Board Committee	Composition	
INVESTMENT COMMITTEE	**CHAIRMAN** Mrs Margaret Lui	**MEMBERS** Dr Chia Tai Tee Ms Susan Soh **CO-OPTED MEMBER** Mr Oo Wooi Cheng
REMUNERATION AND NOMINATION COMMITTEE	**CHAIRMAN** Mr Bill Chang	**MEMBERS** Ms Lim Wan Yong Mr Quek Gim Pew Mr Ravinder Singh
SUSTAINABILITY COMMITTEE	**CHAIRMAN** Mr Soon Sze Meng	**MEMBERS** Mr Chan Hian Lim Mr Bill Chang Ms Neo Gim Huay

INTERNAL AUDIT

Internal Audit provides independent, objective assurance and consulting services designed to add value and improve the University's operations. Internal audit activity is guided by a value-driven philosophy of partnering with other departments to enable SIT to meet its business objectives. Our key role is to assist Management in evaluating their risk management, control and governance processes so that business objectives can be met.

*Includes trustees appointed after 31 March 2022. Information correct as at Aug 2022.

FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME *(For the Financial Year ended 31 March 2022)*

	General Funds		Endowment and Term Funds		Total	
	2022 $'000	2021 $'000	**2022 $'000**	2021 $'000	**2022 $'000**	2021 $'000
Revenue	**96,234**	90,379	**—**	—	**96,234**	90,379
Other income	**2,553**	2,876	**4,185**	6,957	**6,738**	9,833
Operating Expenditure						
Staff and Related Expenses	**(128,373)**	(119,958)	**(521)**	(374)	**(128,894)**	(120,332)
Programme and Student-Related Expenses	**(70,048)**	(65,668)	**(3,761)**	(3,779)	**(73,809)**	(69,447)
Depreciation and Amortisation Expenses	**(44,406)**	(45,072)	**(3)**	—	**(44,409)**	(45,072)
Rental and Other Facility Expenses	**(15,664)**	(14,223)	**—**	—	**(15,664)**	(14,223)
Interest Expense	**(1,250)**	(1,396)	**—**	—	**(1,250)**	(1,396)
Other Operating Expenses	**(24,394)**	(22,207)	**(1,612)**	(1,071)	**(26,006)**	(23,278)
Total Operating Expenditure	**(284,135)**	(268,524)	**(5,897)**	(5,224)	**(290,032)**	(273,748)
Deficit before Investment Income and Government Grants	**(185,348)**	(175,269)	**(1,712)**	1,733	**(187,060)**	(173,536)
Net Investment Income	**542**	638	**39,866**	129,047	**40,408**	129,685
(Deficit)/Surplus before Government Grants	**(184,806)**	(174,631)	**38,154**	130,780	**(146,652)**	(43,851)
Government Grants	**218,947**	217,082	**—**	—	**218,947**	217,082
Net Surplus, representing Total Comprehensive Income	**34,141**	42,451	**38,154**	130,780	**72,295**	173,231

FINANCIAL STATEMENTS

STATEMENT OF FINANCIAL POSITION *(As at 31 March 2022)*

	Group 2022 $'000	Group 2021 $'000	SIT 2022 $'000	SIT 2021 $'000
ASSETS				
Non-Current Assets				
Investments in Subsidiaries	—	—	—[a]	—[a]
Property, Plant and Equipment	777,031	667,676	776,520	667,676
Intangible Assets	2,627	4,558	2,627	4,530
Student Loans	309	508	309	508
Other Non-Current Assets	63,974	67,155	63,940	67,155
Total Non-Current Assets	**843,941**	**739,897**	**843,396**	**739,869**
Current Assets				
Cash and Cash Equivalents	270,109	292,344	270,098	292,244
Financial Assets at Fair Value through Profit or Loss	811,608	707,400	811,608	707,400
Deposits for Investments	2,584	20,154	2,584	20,154
Fees and Other Receivables	123,523	84,115	124,652	84,418
Student Loans	81	127	81	127
Other Current Assets	10,505	20,404	10,505	20,401
Derivative Financial Instruments	20	—	20	—
Total Current Assets	**1,218,430**	**1,124,544**	**1,219,548**	**1,124,744**
TOTAL ASSETS	**2,062,371**	**1,864,441**	**2,062,944**	**1,864,613**
LIABILITIES				
Current Liabilities				
Trade and Other Payables	77,383	73,363	77,414	73,283
Deferred Tuition Fee Income	9,207	9,400	9,207	9,400
Grants Received In Advance	132,673	159,981	132,673	159,981
Lease Liabilities	4,888	5,598	4,884	5,598
Borrowings	43	—	43	—
Derivative Financial Instruments	—	18	—	18
Total Current Liabilities	**224,194**	**248,360**	**224,221**	**248,280**
NET CURRENT ASSETS	**994,236**	**876,184**	**995,327**	**876,464**
Non-Current Liabilities				
Deferred Capital Grants	591,652	513,922	591,652	513,908
Other Deferred Grants	66,847	70,174	66,847	70,174
Lease Liabilities	32,892	37,114	32,371	37,114
Borrowings	34,000	—	34,000	—
Total Non-Current Liabilities	**725,391**	**621,210**	**724,870**	**621,196**
TOTAL LIABILITIES	**949,585**	**869,570**	**949,091**	**869,476**
NET ASSETS	**1,112,786**	**994,871**	**1,113,853**	**995,137**
FUNDS AND RESERVES				
General Funds				
- Accumulated Surplus	245,642	211,501	246,709	211,767
Endowment and Term Funds				
- Capital	631,131	585,511	631,131	585,511
- Accumulated Surplus	236,013	197,859	236,013	197,859
	867,144	783,370	867,144	783,370
TOTAL FUNDS AND RESERVES	**1,112,786**	**994,871**	**1,113,853**	**995,137**

[a] *Less than $1,000*

CONSOLIDATED STATEMENT OF CHANGES IN FUNDS AND RESERVES *(For the Financial Year ended 31 March 2022)*

	General Funds $'000	Endowment and Term Funds $'000	Total $'000
2022			
Balance at 1 April 2021	211,501	783,370	994,871
Net Surplus, representing Total Comprehensive Income	34,141	38,154	72,295
Government Grants and Donations	—	45,620	45,620
Balance at 31 March 2022	**245,642**	**867,144**	**1,112,786**
2021			
Balance at 1 April 2020	169,050	612,415	781,465
Net Surplus, representing Total Comprehensive Income	42,451	130,780	173,231
Government Grants and Donations	—	40,175	40,175
Balance at 31 March 2022	211,501	783,370	994,871

CONSOLIDATED STATEMENT OF CASH FLOWS *(For the Financial Year ended 31 March 2022)*

	2022 $'000	2021 $'000
Cash Flows From Operating Activities		
Deficit before Government Grants	(146,652)	(43,851)
Adjustments for:		
Depreciation and Amortisation	44,409	45,072
Donations	(4,185)	(6,957)
Net Loss/(Gain) on Disposal of Property, Plant and Equipment	(12)	9
Interest Income	(1,230)	(1,599)
Dividend Income	(4,138)	(2,405)
Currency Exchange Loss/(Gain)	(201)	171
Fair Value (Gain)/Loss on Financial Assets at Fair Value through Profit or Loss	(27,650)	(95,159)
Fair Value (Gain)/Loss on Derivative Financial Instruments	52	(177)
Gain on Disposal of Financial Assets at Fair Value through Profit or Loss	(7,241)	(30,516)
Interest Expense	1,250	1,396
Loss Allowance	4	(12)
Operating Cash Flows before Changes in Working Capital	(145,594)	(134,028)
Change in Operating Assets and Liabilities		
Fees and Other Receivables	(28,428)	10,296
Student Loans and Other Assets	13,325	(8,541)
Trade and Other Payables	1,624	(670)
Net Cash Used in Operating Activities	(159,073)	(132,943)
Cash Flows From Investing Activities		
Purchase of Property, Plant and Equipment and Intangible Assets	(148,407)	(119,963)
Proceeds from Disposal of Property, Plant and Equipment	17	1
Purchase of Financial Assets at Fair Value through Profit or Loss	(157,338)	(259,339)
Proceeds from Disposal of Financial Assets at Fair Value through Profit or Loss	108,175	166,772
Deposits for Investments	(2,584)	(20,154)
Prepayment of Right-of-Use Assets	—	(17,562)
Settlement of Currency Forwards	(90)	283
Interest Received	1,487	1,852
Dividend Received	4,138	2,405
Net Cash Used in Investing Activities	(194,602)	(245,705)
Cash Flows From Financing Activities		
Operating Grants Received	146,063	135,518
Development Grants Received	72,784	230,100
Other Government Grants Received	27,969	28,062
Matching Endowment Grants Received	41,103	101,911
Donations Received	16,687	17,040
Principal Payment of Lease Liabilities #	(5,916)	(5,598)
Interest Paid on Lease Liabilities #	(1,250)	(1,396)
Proceeds from Borrowings #	34,000	—
Net Cash Flows Generated From Financing Activities	331,440	505,637
Net (Decrease)/Increase in Cash and Cash Equivalents	(22,235)	126,989
Cash and Cash Equivalents at Beginning of Financial Year	292,344	165,355
Cash and Cash Equivalents at End of Financial Year	270,109	292,344

*See **NOTE A**

CONSOLIDATED STATEMENT OF CASH FLOWS (cont'd) *(For the Financial Year ended 31 March 2022)*

NOTE A: Reconciliation of Liabilities Arising From Financing Activities

	1 April 2021 $'000	Principal and Interest Payments $'000	Proceeds from Borrowings $'000	Non-Cash Changes — Additions $'000	Non-Cash Changes — Interest Expense $'000	31 March 2022 $'000
2022						
Lease Liabilities	42,712	(7,166)	—	984	1,250	37,780
Borrowings	—	—	34,000	—	43	34,043

	1 April 2020 $'000	Principal and Interest Payments $'000	Proceeds from Borrowings $'000	Non-Cash Changes — Additions $'000	Non-Cash Changes — Interest Expense $'000	31 March 2021 $'000
2021						
Lease Liabilities	47,463	(24,606)	—	18,459	1,396	42,712

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SIT graduate Jana Chan credits her smooth transition into her career as a full-fledged occupational therapist to SIT's applied learning approach. The University's close ties with industry gave her the hands-on exposure she needed to become truly ready for the healthcare industry.

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