



## **NEWS RELEASE**

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### **NTU Singapore launches pan-university initiative to boost innovation and entrepreneurship**

To support Singapore's drive towards an economy based on innovation and knowledge, **Nanyang Technological University, Singapore (NTU Singapore)** has launched a new initiative to boost its innovation capabilities and speed up research commercialisation.

Through its **NTU Innovation and Entrepreneurship (NTU I&E)** initiative, the University will ramp up its educational programmes to nurture entrepreneurs and create a more conducive environment for mentoring and supporting students, faculty and alumni looking to turn their ideas into market-ready products.

The initiative was launched by **NTU Acting President and Provost Professor Ling San** and **Guest-of-Honour Ms Low Yen Ling, Minister of State for Trade and Industry, and Culture, Community and Youth**.

At the event, plans were unveiled for the new **NTU Innovation Port** – a physical and digital one-stop centre for all things innovation-related, located at the North and South Spines of the University's main campus. The centre will serve as a common space for the NTU community and external partners to discuss start-up and innovation ideas, as well as assist industry partners looking to collaborate or license technologies.

NTU I&E encompasses both the revamped NTU Entrepreneurship Academy (NTUpreneur) – which will provide entrepreneurship education and cultivate an entrepreneurial mindset in students – and the University's existing innovation and enterprise company NTUitive, which is focused on commercialising innovations and incubating start-ups.

**NTU Acting President Prof Ling** said the launch of NTU I&E is a new milestone for the University and that the initiative builds on successful efforts to nurture spin-off companies and commercialise research.

“The world is changing at an unprecedented pace. The skills and knowledge that our students need in order to succeed are also evolving rapidly with digitalisation and sustainability at the forefront of new industries,” Prof Ling said.

“Globally, we need future-ready graduates who are adept and resilient, and who can thrive even in the face of challenges and changing environments. Thus, we need to reinforce a culture of curiosity to drive innovation within the NTU community, as well as equip our students with the skills required to be problem-solvers, entrepreneurs and leaders who can rise to the challenge in any setting.”

The I&E initiative is part of the **NTU 2025 Strategic Plan**, an ambitious road map announced in 2021 that guides NTU in becoming a global university founded on science and technology, and that nurtures leaders who can make a positive societal impact through interdisciplinary education and research.

**Professor Louis Phee, Vice President (Innovation and Entrepreneurship) and Dean of the College of Engineering**, is leading the NTU I&E initiative.

“Our vision is to create a vibrant innovation and entrepreneurship ecosystem covering the entire spectrum of activity, from cultivating an entrepreneurial mindset through holistic education and experiential learning, to starting a business. We aim to be a fertile breeding ground where great ideas, supported by a strong foundation in education and research, translate into successful commercial entities that ultimately benefit Singapore’s economy,” said Prof Phee, a serial innovator who holds multiple patents to his name.

### **Grooming the next generation of innovators**

In the last two decades, NTU has groomed over 10,000 students (undergraduates, postgraduates and lifelong learners) who took entrepreneurship modules and courses. Of these, more than 2,000 students took a Minor in Entrepreneurship during their undergraduate studies. To cater for rising demand, the University launched a Second Major in Entrepreneurship in August 2021 that will be made available to all undergrads across disciplines.

One of NTU’s most successful entrepreneurship programmes is the Overseas Entrepreneurship Programme. Under the programme, more than 320 students travelled overseas to work with start-ups and accelerators in the United States, Europe, China, Southeast Asia and Australia. Of these students, 45 have since been inspired to start their own companies or join a start-up after graduating.

The NTU I&E initiative seeks to build on these successes. Through NTUpreneur, students from all disciplines will gain better and easier access to mentorship, modules and courses related to entrepreneurship, as well as more internships.

Experiential learning programmes such as innovation challenges, training bootcamps and workshops will be organised for students as part of their journey of exploration and discovery. The Overseas Entrepreneurship Programme will also be expanded to include even more countries such as Indonesia, Vietnam, Thailand, Sweden and Finland. The number of placements available will be increased too.

More industry-partnered hackathons and competitions will be organised, like the new mega innovation “Port63 Challenge” due to launch later this year. The challenge aims to train and nurture young and entrepreneurial talent to explore innovation, solve real-world industry problems, and create social impact through experiential learning.

There is also a new “Kumar Sustainability and Innovation Prize” established by the Kumar Family Foundation to encourage and support NTU students to achieve excellence in sustainability, innovation and entrepreneurship. The top prize is S\$50,000 and the two runner-up prizes are S\$25,000 each.

### **Showcase of NTU start-ups and innovations**

To inspire students and faculty, over 40 NTU innovations and start-ups were showcased at the exhibition area of the I&E launch event. These ranged from deep tech software powered by blockchain and artificial intelligence (AI), to robotics, food technology and health and biomedical devices.

One of the deep tech start-ups is **Hummus Education**, an education technology firm founded by NTU alumni Ms Melissa Ng, an ex-banker turned entrepreneur, with two other alumni. Her company’s first product is *BrookieKids*, an AI-powered software which helps to support language development in preschool children, especially in their second language.

The product turns spaces and objects into language-learning opportunities. For example, when a child scans a QR code of an object, the software initiates a conversation with the kid in a second language and uses speech recognition to understand the child’s replies.

Another start-up company is **RNAscence Biotech**, co-founded by two NTU professors, a research fellow and an NTU PhD student. Together, they developed a skin patch made from hundreds of bio-dissolvable microneedles that deliver RNA-based active nanoparticles that can significantly reduce scar formation.

The anti-scar technology was developed by Associate Professor Timothy Tan and Dr Chun Yong Yao from the School of Chemistry, Chemical Engineering and Biotechnology, and Associate Professor Tey Hong Liang from the Lee Kong Chian School of Medicine. Clinical trial results so far showed that the patch led to a 79 per cent reduction in scar volume after 60 days. Seven in 10 patients also had better outcomes than the current standard-of-care.

Since 2015, NTUitive has successfully incubated more than 330 start-ups and spin-off companies, and has licensed over 780 intellectual properties including patents. To further help NTU start-ups get a head start in their enterprise journey, NTUitive will have a new team of venture builders – people who have both technical expertise and business experience – to help guide and mentor aspiring entrepreneurs.

A new online patent marketplace platform will also be developed to increase awareness of the University's portfolio of start-up companies and intellectual properties. It will consolidate NTU innovations ready for commercialisation as well as facilitate networking and collaboration with more than 200 industry partners.

NTU's efforts in I&E are in line with Singapore's Research, Innovation and Enterprise 2025 Plan and will contribute to Singapore's upcoming Jurong Innovation District. The University is poised to become an epicentre of knowledge creation, innovation and industry engagement, supporting businesses with cutting-edge technologies, top-class talents and in-house research capabilities.

Many of NTU's start-ups and spin-offs are also currently housed at the NTU Innovation Centre on the NTU Smart Campus and the nearby CleanTech Park, putting them right at the heart of Singapore's Industry 4.0 transformation.

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***About Nanyang Technological University, Singapore***

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Medicine, Humanities, Arts, & Social Sciences, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies, Earth Observatory of Singapore, and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Nanyang Environment & Water Research Institute (NEWRI) and Energy Research Institute @ NTU (ERI@N).

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world's top universities, the University's main campus is also frequently listed among the world's most beautiful. Known for its sustainability, over 95% of its building projects are certified Green Mark Platinum. Apart from its main campus, NTU also has a medical campus in Novena, Singapore's healthcare district.

For more information, visit [www.ntu.edu.sg](http://www.ntu.edu.sg)