NTU Singapore launches new strategic plan, remaking learning, innovation and interdisciplinary collaboration

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Nanyang Technological University, Singapore (NTU Singapore) today unveiled its NTU 2025 strategic plan which details the University's education, research and innovation ambitions and goals for the next five years and offers a roadmap to achieve them.

At the top of its ambitious agenda for NTU 2025, the university will introduce new paradigms that respond to the changes brought about by the accelerating pace of technology, and to the challenges facing humanity in the post-COVID world. To transform learning at NTU, undergraduates will be offered new interdisciplinary degree programmes, core curricula and internships to enrich their disciplinary training. NTU will also establish a new Institute for Pedagogical Innovation, Research and Excellence (InsPIRE).

NTU 2025 was launched at the University's Town Hall today where NTU President Professor Subra Suresh highlighted three major goals for the University – achieving uniformity of excellence in all activities; growing NTU's national and global impact; and fostering transformative interdisciplinary interactions across NTU's Colleges and Schools.

NTU 2025 reinforces a strong commitment to the core pillars of the university in education, research and innovation, with the addition of the OneNTU Community as a new pillar.

Education

To prepare future-ready students with character, competence and cognitive agility who adapt to an unpredictable and fast-changing world, the new NTU undergraduate education places strong emphasis on interdisciplinary skills along with disciplinary and domain expertise. It also offers new pathways for experiential and collaborative learning that cultivate leadership and entrepreneurship.

From the new academic year starting in August 2021, all freshmen (except those studying medicine and at the National Institute of Education) will be offered a university-wide common interdisciplinary core curriculum that covers topics such as digital literacy, communication and inquiry, ethics and global challenges.

Professor Subra Suresh said, "The NTU 2025 vision and the launch this year of new degrees, core curricular offerings, experiential learning, and internship opportunities to all our undergraduate students and to doctoral students will help transform our education ecosystem. This will also help our students to better prepare not only for successful careers but also for a lifetime of learning, impact and service to society."

Undergraduates will have greater flexibility to pursue interdisciplinary courses and panuniversity majors and educational offerings. A new interdisciplinary undergraduate Major in Economics and Data Science will be introduced from Academic Year 2021. Select PhD level courses will also be made available to eligible undergraduate students.

Internships will become an integral part of the undergraduate experience and credit requirements for all students starting from the 2021 cohort enrolling this August. Students will be able to gain greater exposure to research internships through corporate laboratories

and other joint laboratories established on NTU Campus in partnership with industry. Internships will also be available as an option for graduate students.

To nurture entrepreneurs who drive innovation and contribute to Singapore's future as a Smart Nation, NTU will offer a new Second Major in Entrepreneurship.

The University will also introduce new pan-university advanced degree programmes in interdisciplinary areas, such as neuroscience.

To help graduates to continually upgrade their skills and remain competitive in the global talent market, NTU will establish new collaborations with corporate partners to create more industry-relevant, modular and stackable courses.

NTU will also expand its university-wide MiniMasters[™], a new mechanism for upskilling launched during the COVID-19 circuit breaker in 2020, and continuing education and training programmes offered by its Centre for Professional and Continuing Education (PaCE@NTU) to help professionals, managers and executives upskill and keep pace with the changing nature of work transformed by rapidly emerging technologies.

To achieve this rich portfolio of educational initiatives through a university-wide and centrally coordinated structure, NTU will establish a new Institute for Pedagogical Innovation, Research and Excellence (InsPIRE) to promote excellence in teaching and enhance student learning. Such an integrated institute will allow stronger synergies across pedagogy, technology, research and scholarship on teaching and learning, including the science of learning, to inspire innovation in teaching, facilitate the remaking of education at NTU, and to support lifelong learners.

To intensify interdisciplinary education and research across the University, NTU will strengthen its faculty ranks by creating new interdisciplinary faculty positions across colleges and schools.

LEAD@NTU, a new university-wide leadership programme, has been launched to nurture leadership training for students. This initiative will also include leadership training and mentoring programmes and tracks for NTU faculty and staff at different stages of their career development.

Research and Innovation

Under the NTU 2025 plan, NTU aims to strongly support high-impact interdisciplinary research to address global grand challenges, and to create mechanisms that accelerate the translation of research discoveries into innovation.

The University has identified six research clusters that are also aligned with Singapore's Research, Innovation & Enterprise 2025 plan: health & society; brain & learning; culture, organisations & society; artificial and augmented intelligence; resilient urbanisation & natural ecosystems; and the future of industry. NTU will develop new academic and research entities and programmes that build on the University's unique and globally-recognised strengths to support these six clusters.

The NTU 2025 plan seeks to redouble our efforts to transform the NTU Smart Campus into a living testbed for innovative technologies and sustainable solutions that deploy the latest digital tools and technologies.

To advance these efforts and become the partner of choice with public and private enterprises, the University is establishing the Global Alliance of Industries @ NTU (GAIN).

GAIN will be a gateway for industry to connect with the entire research and innovation ecosystem of NTU, and for the NTU community to forge alliances and collaborations with industry.

Applying its own innovations on the Smart Campus and to demonstrate through measurable action its strong commitment to sustainability, NTU 2025 will seek to bring all NTU buildings to Green Mark Platinum certification level (equivalent to LEED Platinum certification) based on their design and environmental footprint within the next five years.

As part of the 2025 plan, NTU will set an ambitious target of halving its net energy utilisation, water usage, and waste generation each by March 2026, compared to the levels of 2011.

Creating a more cohesive OneNTU community

NTU strives to be a community that is driven by excellence, is open and welcoming, and one that provides a safe environment and equal opportunities for learning and working. NTU will foster a diverse, inclusive and cohesive community, and nurture its core values.

A new University Wellbeing Office will provide a strong support ecosystem for employees and students, effective April 2021.

With positive mental health as a key priority, it will coordinate a number of new efforts, including strengthening a culture of mutual respect and collegial support, expanding preventive and outreach programmes, ensuring timely intervention, improving counselling services, enhancing support mechanisms, and strengthening policies, procedures and partnerships.

Humanity's grand challenges

NTU 2025 was developed with extensive consultation and input from across the NTU community. The strategic plan puts NTU at the forefront of tackling four of humanity's grand challenges:

- mitigating our impact on the environment;
- harnessing the science, art and technology of learning;
- addressing technology's impact on humanity;
- responding to the needs and challenges of healthy living and ageing.

Professor Suresh said, "NTU has identified four grand challenges where the University is well positioned to marshal our globally recognised intellectual assets and talent, and to play a leadership role in finding solutions to these challenges. Achieving the goals that we have set for ourselves in this strategic plan will position NTU for the next stage in its significant growth and impact, and further distinguish NTU Singapore uniquely among its international peers."

NTU will strengthen its talent development, financial resilience, and digital transformation of its administrative processes to better support the University's aspirations and strategic plan.

For more information on NTU 2025, visit: <u>www.ntu.edu.sg/ntu2025</u>