



Innovating Today
Imagining Tomorrow

#### The Hong Kong University of Science and Technology

Clear Water Bay, Kowloon, Hong Kong Website: http://strategicplan.ust.hk



## Contents

Fo	preword	2
St	trategic Plan Schematic Diagram	2
O	ur Core Values	6
5	Strategic Objectives	
•	A University of Choice for Talents, attractive to the best global minds	3
•	A Leader in Education and Research, setting the trends for future	1
•	A Powerhouse for Innovation and Entrepreneurship, evidenced by the successes of our faculty, students, and alumni	18
•	An Exemplar of Best-in-Class Standards, Practices, and Operations, as an agile and effective organization	18
•	A Champion of Diversity, to build an inclusive and collaborative community	2-
В	eyond 2020	22





The Hon Andrew C S Liao, *GBS*, *SC*, *JP* Chairman, University Council



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President

## **Foreword**

KUST is a very special university, as the past 25 years have shown, and we are proud to be leading this remarkable institution into the next phase of development with the release of the new 5-year Strategic Plan 2020.

Advancing from the substantial platform of accomplishment established by the University's preceding road maps, the HKUST 5-year Strategic Plan 2020 highlights fresh areas of focus to harness and optimize the changing times, and specific objectives to steer actions. It is the result of wide engagement over two years with members of the University and local community, including valuable contributions from the Council and Court.

In summary, we seek to be recognized as:

- A University of choice for <u>talents</u>, attractive to the best global minds
- A <u>leader</u> in education and research, setting the trends for future
- A powerhouse for <u>innovation and entrepreneurship</u>, evidenced by the successes of our faculty, students, and alumni

- An exemplar of <u>best-in-class</u> standards, practices, and operations, as an agile and effective organization
- A champion of <u>diversity</u>, to build an inclusive and collaborative community

The University has built a reputation for pace-setting endeavor and attainment. The next five years will provide a significant window in which to take ownership of the evolving landscape in innovation and entrepreneurship as well as education and research. Higher education institutions are increasingly expected to participate in and make an impact on society through knowledge transfer, technology advances and solutions, and business development, the new Strategic Plan will serve to facilitate HKUST in meeting needs of the society.

Through our Strategic Plan, drawn from the collective knowledge of the HKUST family, we intend to aim high, leap boundaries, and be bold in our endeavors. We seek to bring together the best minds and talents to work together at our inspiring campus and to go out into the world to improve people's lives.

## Strategic Plan **Schematic Diagram**

# Talents

To be a leading University with significant international impact and strong local commitment.

Global - To be a world-class university at the cutting edge internationally in all targeted fields of pursuit.

# Vision

Diversity

National - To contribute to the economic and social development of the nation as a leading University in China.

Local - To play a key role, in partnership with government, business, and industry, in the development of Hong Kong as a knowledge-based society.

knowledge through teaching and research, particularly in science, technology, engineering, management and business studies; Innovation of the Infreprendiction of the Prendiction of the Infresh of the Infre and at the postgraduate

# Mission

To advance learning and







### **Our Core Values**

HKUST's core values form the guiding principles for our institutional development, and shape our distinctive culture. These values have been distilled from University-wide insights and contributions, gathered through multiple rounds of consultation.

In the implementation of our Strategic Plan, we look to our core values to steer us through decision-making and bring our campus community together:

## Excellence, Integrity, and Academic Freedom

The University is committed to be a leader in academic world through excellence in teaching, research and people, while placing utmost value in the freedom to conduct academic activities, subject to the highest standards of academic integrity and honesty.

#### Global Vision and Local Commitment

The University positions itself as a focused elite research university at the cutting edge in all target fields of pursuit with global influence. We bring together global thought leaders to foster interaction, and partner with government, business and industry, to make significant contribution to the economic and social development both locally and nationally. In addition, we encourage and commend our faculty, staff and students to dedicate themselves to service to the local community.

#### Tan-do Spirit

The University stands for the can-do spirit with responsibility and integrity. We cherish entrepreneurial

and innovative thinking for solutions to problems in daily work. We cultivate a community characterized by the traits of risk-taking, willingness to overcome challenges, innovativeness, creativeness, and trust in one-self. This also implies that the University provides an environment for students and faculty to pursue entrepreneurship.

#### Inclusiveness, Diversity, and Respect

The University values and respects the differences of individuals, whether they are of different race, gender, cultural backgrounds, religion, personal interests and in other dimensions, and strives to embrace these diverse forces to foster an inclusive and caring environment. This will allow us to harness the richness of ideas and perspectives for the benefit of the whole community.

#### 1-HKUST

The entire HKUST family work together as an integrated and holistic team. By bringing together the different ideas and roles of our people (students, faculty, staff, alumni, Council/Court, and friends of HKUST) and strengths of different academic and professional disciplines, we strive to make the whole of our university's mission bigger than the sum of its parts.



## **5 Strategic Objectives**



#### **STRATEGIES**

## Proactively attract and recruit the best students

Increase selectivity and improve quality of student intake: to keep and extend the University's capabilities as an incubator of academic excellence by attracting high-performing students who are passionate about their studies and research, and motivated to succeed as individuals and as a team.

**Attract diverse student talents of varied excellence:** to ensure a world-class international and multicultural

campus environment through recruitment of undergraduates and postgraduates from a wide range of cultures and backgrounds, and with different interests, perspectives and abilities to promote personal growth and knowledge exchange, enriching the educational experience of all students.

**Deliver comprehensive branding and outreach campaign on a global scale:** to increase knowledge and presence of HKUST through effective communication and promotion of the University brand, our offerings, unique positioning and competitive edge, and to actively reach out to students, teachers, and parents.



# A University of Choice for Talents, attractive to the best global minds

First-rate people throughout the University community are the fundamental requirement for achieving our goals. We seek to prioritize global recruitment of top global talent to retain and further diversify HKUST's critical mass of world-class academics, researchers, staff and students in order to drive cutting-edge education and research initiatives; deliver academic and administrative excellence through a dynamic and integrated working environment; and keep the University at the forefront of an increasingly competitive higher education landscape.



#### Proactively attract and recruit the best faculty

Undertake proactive faculty recruitment across all disciplines from around the world: to maintain the vital input of high-caliber academics – the key pillar of our teaching and research excellence – at a time of intensifying competition for top minds among local and international institutions. In line with this, to significantly advance HKUST's academic strengths in selected cross-disciplinary areas through clustered hiring in the targeted areas of (i) data science (ii) sustainability (iii) public policy (iv) autonomous systems & robotics, and (v) design thinking & entrepreneurship.

Strengthen faculty remuneration package and support for their families: to complement the University's faculty hiring plan, retention capabilities, and add to competitiveness, the remuneration package for new and existing faculty will be refined and strengthened, and support for new faculty and their families enhanced.

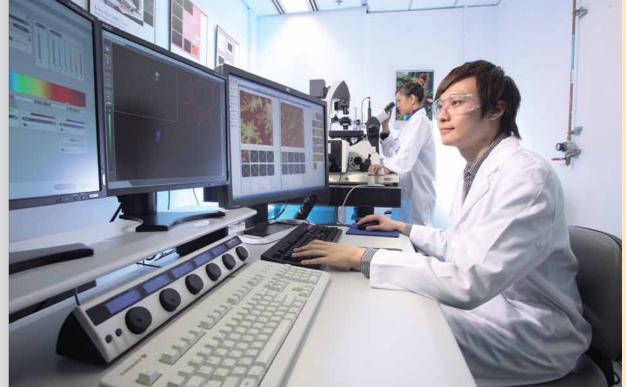
**Strengthen systems to develop and retain talent:** to create an empowering workplace through devising plans and measures to systematically develop faculty and leadership capabilities to keep global front-runners.

#### Proactively attract and recruit the best staff

Build HKUST's reputation as an "employer of choice": by fully recognizing our non-academic staff as key enablers of our University's success story. We will seek to create a workplace where staff feel motivated, respected, supported, empowered, and committed to success.

Create an environment to encourage staff creativity and innovation: by leveraging HKUST's young vigor and flat hierarchy to nurture an environment that encourages and enables staff to utilize their creativity, and creating platforms to foster the generation of bottom-up ideas.





2 A Leader in Education and Research, setting the trends for future

Having established ourselves as one of the first elite research-driven institutions in the region, HKUST must now raise the bar and be prepared to look beyond conventional academic recognitions of publications and citations to play a positive and impactful intellectual leadership role locally, regionally and globally, and set the trends for the future.

#### **STRATEGIES**

Drive towards a comprehensive transformative educational experience to support motivated and effective learning

Champion a distinctive and flexible curriculum: to support motivated and effective learning and enable students to take advantage of HKUST's full breadth and expertise across the disciplinary Schools and Interdisciplinary Programs Office based on their interests. We will also strengthen the distinctiveness of our curriculum and develop innovative and differentiated pedagogy and educational models.

**Emphasize the engagement and motivation of students:** to provide the best possible supportive environment with an aim of becoming a student-centric university that motivates through active engagement and offers the necessary support to students of all abilities and backgrounds, including those with special needs.

**Provide a vibrant and internationalized student experience:** to offer multi-faceted experiences and more opportunities in and out of classrooms for students to develop their personal attributes and competencies, discover their own passion and interests, form lasting friendships with peers from around the world, and widen their horizons intellectually and globally.

Nurture highly competent graduates with outstanding attributes: to help students realize their full potential and contribute meaningfully to society. Our graduates are already ranked among the world's "most employable".\* Going forward, we will continue to inspire and equip graduates to become future leaders and serve the societal needs, and help overcome global challenges.

**Strengthen the support for postgraduate education:** to nurture research postgraduates with cutting-edge research skills, as well as a comprehensive set of transferable skills to enhance personal growth and career development. We will also review the offerings, position and role of our taught postgraduate programs to ensure full alignment with our mission and vision.

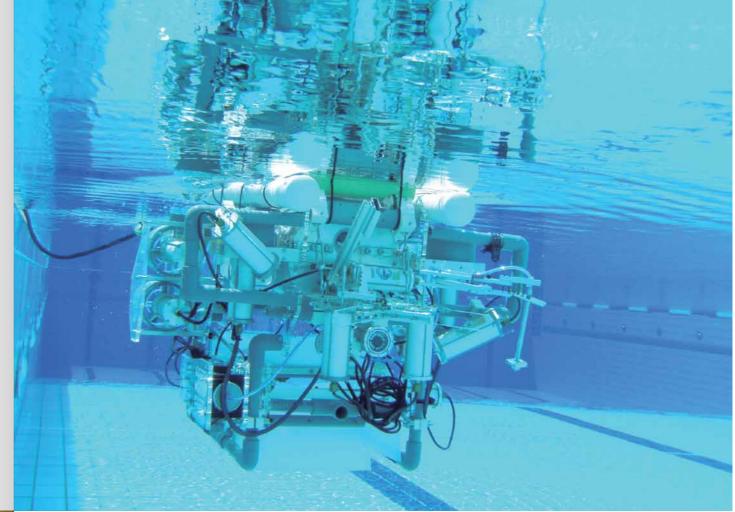
\*No.13, 2016 Global Employability University Ranking (Emerging)

#### Originate frontier knowledge and excel in breakthrough research in selected areas to set the trends for new and impactful research directions and thinking

**Pursue five targeted areas:** by building up research strengths in the strategic areas of data science, sustainability, public policy, autonomous systems & robotics, and design thinking & entrepreneurship; and devoting resources and establishing effective mechanisms to support directed research.

Focus on frontier research and explore new but promising research domains: by encouraging selective level of risk-taking and adopting more adventurous and bolder approach for excelling in breakthrough research, and exploring new and unconventional research domains. The creation of new knowledge will not only offer high academic value, but also enable us to create practical solutions transferrable to the world. Institutional support





will be provided to encourage faculty to undertake both impactful fundamental and translational research, particularly in solving societal problems and contributing to Hong Kong's advancement. Actively seek out external/competitive research funding: to keenly pursue major external and competitive funding for our frontier research, professional and scholarly activities. We will enhance our supportive schemes and policies to encourage and facilitate preparation of high-quality research proposals and mentorship in grant applications.



A Powerhouse for Innovation and Entrepreneurship, evidenced by the successes of our faculty, students, and alumni

Knowledge transfer is always a core part of HKUST's mission since the very beginning. We are already recognized as an influential "KT" force, as shown by the endeavors of our faculty, students, and alumni, and will seek to actively extend our innovation and entrepreneurial culture to benefit society at large.

Extend our research strengths and presence in Mainland and internationally through strategic partnerships: by amplifying HKUST's outstanding research performance record and standing through establishing an incentive and support system to encourage faculty to undertake leadership roles within global economic and social platforms and increase our impact on Hong Kong, Mainland and internationally.

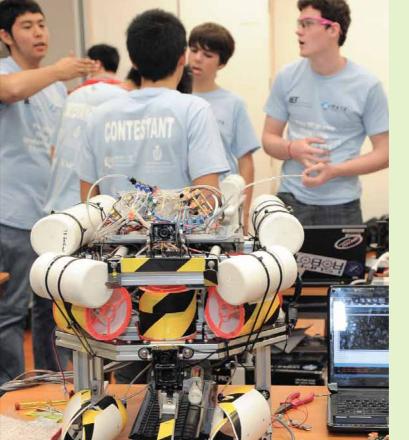
We will also further promote and publicize our research achievements, innovation and entrepreneurship.

Undertake a definitive plan for renewal of research facilities: by critically reviewing and projecting our needs in view of the current and emerging research landscape, and undertaking renewal and upgrading of our research facilities to ensure our infrastructure continues to be top-notch, relevant, and effective in supporting world-class research at HKUST.

Support the strategic development of research institutes and centers: to foster an interdisciplinary environment that helps promote fundamental and translational research to advance knowledge

in specialized fields, create greater synergies and deliver new advances on our research agenda. We will build

up leadership and strengthen engagement with research institutes and centers with more targeted support in developing large-scale projects and future physical infrastructure.



#### **STRATEGIES**

Leverage fully on available opportunities and resources in science and technology to strengthen and extend our knowledge transfer efforts

Fully leverage opportunities in Hong Kong, Mainland China, and the world: as local, national and international policy and investment momentum in education and research, particularly science and technology, opens up exciting new possibilities. The University will actively seek partnerships and engage available opportunities and funding sources, foster different linkages and widen the scope of our faculty and students, and extend our research expertise to produce results of value to the economy and society.



Develop HKUST's Mainland platform headquartered in Nansha to accelerate innovation and knowledge transfer: by coordinating HKUST's innovation and technology transfer activities in the Mainland by using Nansha as a base via the restructured Fok Ying Tung Research Institute and also riding on the substantial head-start in our Industry, Education and Research Base in Shenzhen.

Encourage and provide the best environment for nurturing entrepreneurship among faculty and students

**Develop an innovation and entrepreneurial ecosystem:** by creating more platforms for developing an innovation and entrepreneurial ecosystem, and providing effective linkage support, mentorship training and venture capital fund raising for start-ups, technology transfer, and industry collaborations in order to realize research results from concepts to prototypes and to develop business plans.

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Provide distinctive entrepreneurship education offerings and activities across disciplines: through developing an overall entrepreneurship education framework, as well as organizing and promoting activities to stimulate and foster an entrepreneurship culture, such as the highly successful HKUST One Million Dollar Entrepreneurship Competition that has expanded from our campus to multiple cities.

Recognize entrepreneurship and knowledge transfer achievements: by all members of the University community and promote and encourage broader participation to forge stronger synergies in advancing entrepreneurship. In nurturing an innovation entrepreneurship culture, the focus is on transferring the knowledge gained from our education and research endeavors for societal benefit.

Mobilize alumni in supporting innovation and entrepreneurship: by strengthening links with our graduates around the world, many of whom have become successful innovators and experienced entrepreneurs, and involving them in University entrepreneurship initiatives in varying capacities.

Advance in social responsibility (including community service), and lead in social entrepreneurship to benefit society

Support the start-up of social enterprises and promote community service: by raising civic awareness and social entrepreneurship and setting up an ecosystem to support social enterprise start-ups. In addition, we will strive to reach out to more students and faculty and encourage them to actively participate in community service programs.



# An Exemplar of Best-in-Class Standards, Practices, and Operations, as an agile and effective organization

World-class talents and global intellectual leadership call for a first-rate administrative support system. Our goal is for the University to serve as a leading example of such a system.

#### **STRATEGIES**

## Develop a high-performance culture, embracing change with a "can-do" attitude

Review and enhance administrative systems, structure, processes: to ensure they continue to serve their purpose in support of the academic, teaching and research activities, and look for ways to streamline structures for effective operations and efficiency gains, and to increase empowerment and innovativeness by embodying a "can-do" culture.

**Nurture a high-performance culture:** that recognizes contributions and accomplishments and builds an environment that attracts, engages,

and retains the best talent. We will strengthen our staff appraisal and recognition system and promote a culture that strives for work excellence and continuous improvement.



Strengthen staff training and leadership development programs: to equip and strengthen relevant skills and capabilities, and increase staff versatility. We will also pursue active succession planning to ensure continued leadership is provided to meet the University's strategic objectives.

**Ensure our compensation structure is competitive:** as part of the "Non-Academic Staffing Review", we will review the terms and conditions of employment for such appointments for possible enhancement.

Provide an inspirational and sustainable campus to work, study, and live

Support the Campus Master Plan (CMP) to advance our academic mission: the University has sought Council's approval in updating the CMP to cover the holistic campus



land use as well as the planning and prioritization of a series of future facilities that can fulfil academic and student needs. We will continue to implement the CMP and look into new infrastructure ideas on need basis for long-term development.

**Develop more community, showcase and interaction spaces on campus:** to encourage catalytic interactions and foster a collaborative culture and friendships building. We will plan for better space utilization and develop more spaces on campus for members of HKUST to come together, as well as learn from and collaborate with each other to further our pursuit of excellence in education and research.

Implement quality assurance mechanism for campus facilities: to systematically address the issues of facility renewal and upgrading as buildings and equipment have started to age. The goal is to continue to provide a reliable, safe and productive studying, working and living environment.

Develop a smart and sustainable campus: we are committed to creating an environmentally friendly campus and working towards the vision of becoming a global leader in sustainability education, demonstrating cutting-edge research and sustainable operations, and promoting and communicating sustainability to the wider community.

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## Optimize financial resources of the University

Agree strategic financial goals and construct strategic financial model: to cater for on-going operational needs and to support new and growing developmental initiatives. To this end, the University and Council will work together to agree strategic financial goals.

Optimize use of surpluses and reserves: through review of financial policies in order to promote an effective and efficient allocation system that supports HKUST priorities.

Improve budget process and management information: to facilitate provision of more complete and transparent financial information for timely decision-making.

# A Champion of Diversity, to build an inclusive and collaborative community

HKUST was built with a diverse community in mind and has advanced to become a dynamic, internationalized university, powered by our core belief that genuine diversity, regardless of demographics, values, cultures, will bring about vigorous diversity of ideas that can broaden perspectives, inspire creativity and innovation, and better prepare students for today's globalized society. We will seek to further promote the integration of our community through championing an open, respectful and collaborative culture.

#### **STRATEGIES**

#### Be a truly diverse, tolerant and welcoming university that respects different views and ideas

Widen the global faculty recruitment pool for balanced representation: to cover a balanced mix of senior and junior faculty, a variety of academic talents and predispositions, including entrepreneurial and practice-oriented faculty. We will work towards a better gender balance among faculty as well as recruitment of

academics with Hong Kong roots to provide local students with role models and boost our social and economic impact in our home city.

Review and enhance policies and operations to support diversity: by putting plans and measures in place to boost support, particularly for gender and ethnic diversity.

# **Explore diverse international opportunities:** to extend our presence and impact regionally and globally. We will seek out collaborative opportunities in education and research, and aim to diversify our partnerships to encompass new and emerging markets, including "One Belt One Road" countries, which can complement our strengths and open up new areas.

**Develop an open, cohesive and collaborative culture across all levels:** by leveraging our compact size and youth to embed agility, collegiality, and solidarity that can enable HKUST to react vibrantly, responsively, and efficiently to external change.



## Beyond 2020

The years from now to 2020 will serve as an important bridge to prepare HKUST for the University's longer-term development in the next 25 years and beyond, locally, regionally and internationally.

We aspire to break through boundaries and generate new fields in line with new times, as well as advance our calling as a pioneering science and technology institution, leader in business and management education and research, and influential contributor in humanities and social science.

We will be a hub for the world's greatest minds; a front-runner and significant partner as a science and technology university in the Pearl River Delta and nationally; and a transformational and life-long catalyst for socially responsible innovators, entrepreneurs, leaders and community pace-setters, with commitment to their local environment and the global vision and confidence to tackle the immense challenges and changes that await society at large in the decades ahead.

Supported and sustained by their enriching HKUST experience and 1-HKUST spirit, our students, graduates, faculty and staff will always be ready to step up and reach higher to inspire and activate the future.





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