

HKUST

annual report
2022 | 2023



HKUST'S 5 CORE VALUES

- Excellence, Integrity, and Academic Freedom
- Global Vision and Local Commitment
- Can-do Spirit
- Inclusiveness, Diversity, and Respect
- 1-HKUST

THE MISSION OF THE UNIVERSITY

- a** To advance learning and knowledge through teaching and research, particularly
 - i** in science, technology, engineering, management and business studies; and
 - ii** at the postgraduate level; and
- b** To assist in the economic and social development of Hong Kong.
(The Laws of Hong Kong: Chapter 1141)

STATEMENT OF VISION

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.

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.

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CHAIRMAN'S

Foreword

I am truly honored to be appointed Chairman of the Council of HKUST in March 2023. It has felt like a homecoming, given my close connections with HKUST which go back more than two decades, first as an adjunct faculty at the Department of Computer Science and Engineering in 2000, and more recently as Professor-at-Large at Jockey Club Institute of Advanced Studies.



I hope that my technology, research and industry experience in Hong Kong, the Mainland and the United States will add a fresh dimension to the collective wisdom of the Council in steering HKUST's mission to advance learning and knowledge in science, technology, engineering, management and business studies. The Council is excited to have the opportunity to work with Professor Nancy IP Yuk-Yu, the University's fifth President and the first woman ever to be appointed to head a publicly funded

university in Hong Kong. We are fortunate to have a solid and diversified Council, with representations from students, faculty members, staff and business professionals. Each of us brings a unique background, perspective and insight, expanding the Council's understanding of the different strategic and operating issues put on the table. I appreciate their devotion and dedication to HKUST.

We have made some remarkable progress in 2023. HKUST (Guangzhou) has admitted its first class of undergraduate students. As HKUST(GZ) is moving onto the second phase of its infrastructure development, the Council is committed to providing its full support to help HKUST(GZ) to become a leading contributor to the economic and social development of Guangzhou, the Greater Bay Area and the Country. The University has made some substantial achievements in collaboration between our Clear Water Bay and Guangzhou campuses under the innovative "Unified HKUST, Complementary Campuses" framework. The Council has provided some guidelines through a Cross-campus Coordination Framework which manages various academic and non-academic issues of common interests. A joint academic consultative mechanism is put in place whereby a Joint Academic Board and joint committee sessions between both Senates will discuss and reach consensus on matters concerning HKUST(GZ)'s academic programs, teaching and learning quality assurance and related issues. Senior management of both campuses have scheduled regular meetings to address practical issues. The Council will continue to review and enhance the governance framework of HKUST(GZ) to ensure accountability and effective management. We held our unprecedented Council meeting on HKUST(GZ) in October so Members can witness firsthand the opportunities and challenges faced by HKUST(GZ). The above underscores the commitment of the two campuses towards a successful collaboration in driving common education, research and knowledge transfer agenda.

The past year has also seen the transformative development of generative AI. HKUST is the first university in Hong Kong to embrace this technology and recognizes the potential of its role in transforming education and research, improving productivity, and supporting knowledge advancement. The Council endorses the incorporation of generative AI technologies, particularly HKUST ChatGPT, into our pedagogical practices starting June 2023. Technological advancement also hinges on the strength of our computing hardware infrastructure. The Council has responded quickly



to providing consent to acquire advanced computing servers and other related infrastructural set up to augment our state-of-the-art high performance computational facilities. Furthermore, the University is committed to collaborating with leading technology companies in different industries to promote the application of AI. In March, the University allocated HK\$10 million to launch the "Education and Generative Artificial Intelligence Fund" (EDGE-AI Fund), inviting faculty and teaching staff to submit proposals to explore new methods for using AI technologies in teaching, and developing best practices.

Upon the solid foundation built in Clear Water Bay (HKUST 1.0), and an expansion into the Greater Bay Area afforded through HKUST(GZ) (HKUST 2.0), the Council endorsed the new administration's HKUST 3.0 Vision Plan in March 2023, which sets the University's long-term strategic directions for the next three decades. Among HKUST 3.0's visionary goals is a University Innovation Technology Park (USTInnoTech Park), the objective of which is to extend our innovation pipeline and foster interactions with industries, contributing to Hong Kong's aspirations to become an innovation and technology (I&T) hub. The University is also exploring the option to establish the third medical school in Hong Kong to address a critical demand for locally trained healthcare professionals and physician-scientists in biomedical discovery. HKUST's commitment to sustainability leadership gains fresh momentum following the Council's approval of the University's updated environmental, social, and governance (ESG) policy in relation to its investment pool. The move sees HKUST become the first university in Hong Kong to pledge to eliminate fossil fuel investments, attesting to the University's commitment to support the United Nation's Sustainable Development Goals (SDGs).



To strengthen the University's capacity to undertake such developments, proposed amendments to the HKUST Ordinance to enhance the management structure were taken forward over the year. Following Council's endorsement and subsequent passage of the HKUST (Amendment) Bill by the Legislative Council, the University will now be able to recruit additional Vice-Presidents. This flexibility in manpower planning will enable HKUST to support our research in six strategic areas and enhance our ability to attract talents.

With all these exciting plans on the horizon, it was heartening to see HKUST's robust local, national, and international support over the year, with numerous delegations and visitors, including Mr. XIA Baolong, Director of the Hong Kong and Macao Affairs Office of the State Council in April, Mr. John LEE, our HKSAR Chief Executive in October, and Ms. WANG Yaping and Mr. ZHANG Lu, Chinese astronauts in November.

In drawing my first Annual Report Foreword to a close, I would like to acknowledge the contribution of the former Council Chairman, Dr. Andrew LIAO Cheung-sing, over his extended eight-year tenure. Having now taken up the role of Court Chairman, Dr. Liao and I will remain in close communication. We are also grateful to Dr. John CHAN Cho-Chak, for his unwavering dedication to his leadership and service in HKUST's development over the past two decades. We are lucky that Dr. Chan is willing to retain a leadership position in the capacity of the University's Pro-Chancellor.

To all Council Members, Administration, faculty, staff, students, alumni, donors and all university stakeholders, thank you for your warm welcome and sterling support. Together, not only will we take on the challenges of this globally testing time, but we will also help address them through ensuring HKUST's continued and far-reaching achievements and impact on both higher education and society.

Chairman, University Council
Prof. Harry SHUM Heung-Yeung



PRESIDENT'S Report

The 2022-23 academic year has been a busy and productive one for HKUST. The campus has regained its vibrance, with the post-pandemic resumption of in-person classes and activities. We have welcomed guests from near and far, and student and academic exchanges with our many university partners outside Hong Kong have restarted.



Moreover, having recently celebrated our 30th Anniversary, we are now looking toward our next 30 years through the development of the HKUST 3.0 Vision Plan and setting strategic goals for the University's future as a globally leading institution for learning, discovery, and innovation.

Leadership Moves

HKUST has undergone several major leadership transitions this year. The University welcomed renowned computer scientist Prof. Harry SHUM Heung-Yeung as Council Chairman in March 2023, while former Council Chairman, Dr. Andrew LIAO Cheung-sing, took up another key role as Court Chairman. HKUST is deeply grateful to Dr. Liao for his eight years of dedicated service to enhancing Council governance and ceaseless endeavors toward realizing HKUST(GZ) and the award-winning Shaw Auditorium. The University is also thankful for the continuing support

of former Court Chairman and long-time HKUST advocate, Dr. John CHAN Cho-Chak, who has become our Pro-Chancellor.

This has also been a memorable year of change for myself: In October 2022, I assumed the Office of HKUST President after 30 fruitful and inspiring years at this exceptional institution. Building on the foundations and achievements of HKUST 1.0 and the development of HKUST(GZ) in HKUST 2.0, I am honored to work with the entire university community and our stakeholders to guide HKUST toward greater achievements and contributions to society. Immediate priorities have been implemented this year amid the evolution of the HKUST 3.0 Vision Plan, which was approved by the University Council in March 2023. The achievement of our HKUST 3.0 goals will be bolstered by the guidance of Prof. Shum, Dr. Liao, and Dr. Chan in the coming years.

Talent Recruitment

As a university's greatness is shaped by its people, a focus in my first year as President has been the recruitment and retention of globally leading academics. HKUST has excelled at this despite this competitive environment. As of 2023, 158 HKUST faculty members were among the world's top 2% of scientists according to a Stanford University ranking. To further support the University's growth and advancement, we launched the "30 for 30 Talent Acquisition Campaign" to recruit 30 exceptional faculty members. This campaign not only aims at attracting the very best, but also to strategically advance the University,

with new recruits under schemes driving research projects on pressing societal issues in six HKUST areas of focus: Biomedical Science and Translational Medicine; Material Science and Future Energy; AI, Future Computing, and Electronics; Innovation for Business Management and FinTech; Environmental Science – Sustainability and Green Tech; and Art Tech and Humanities.

Notable senior management talent onboarded this year includes top international computer scientist, Prof. GUO Yike, as Provost, as well as two accomplished homegrown academics and administrators, Prof. WONG Yung-Hou and Prof. LO Hong-Kam, as Dean of Science and Dean of Engineering, respectively. The recent passage of the HKUST(Amendment) Bill by the Legislative Council in July 2023 removed the cap on the number of Vice-Presidents and provides increased flexibility for manpower planning, particularly for the HKUST 3.0 Vision Plan.

Education Innovation

Daring to boldly widen our educational horizons is in our DNA. To bring interdisciplinary innovation to more areas, we are elevating the Interdisciplinary Programs Office to become the Academy of Interdisciplinary Studies. In addition, HKUST has taken a pace-setting approach to the mass adoption of generative AI, being the first local university to embrace this technological advance. Following consultations with faculty and students, the University issued a set of guidelines in March 2023. We also launched the Education and Generative AI Fund to encourage faculty to integrate generative AI tools into their teaching and learning. To provide opportunities to actively explore the development of AI and ensure accessibility, equity, and security to all members of the HKUST community, in June 2023, we made HKUST ChatGPT, along with tutorials and training kits, available to all members of the University.

Dual-Campus Collaboration

We continued to pioneer dual-campus higher education with the first year of HKUST(GZ). Under the innovative "Unified HKUST, Complementary Campuses" framework, both HKUST in Clear Water Bay and HKUST(GZ) in Nansha collaborate closely on academic programs, research, and facilities while retaining their own unique positioning. We saw HKUST(GZ) begin recruiting its first undergraduates to start in 2023-24. Our commitment to consistent standards was emphasized by the setting up of a Joint Academic Board: a consultative mechanism to ensure comparable quality of academic offerings by the two campuses. Administrative collaboration and clarity on



governance were also enhanced through the establishment of the Cross-campus Coordination Framework and the improvement of the Governance Framework of HKUST(GZ).

Addressing Global Challenges to Impact Society

On the research front, the University has maintained the pace of discovery and generation of solutions to address pressing global challenges. Breakthroughs over the year included the development of innovative polymer technologies targeting three chronic conditions (i.e. dry eye disease, macular degeneration, and knee osteoarthritis), which was one of the three winners of "Gold Medals with Congratulations of the Jury" presented at the 48th International Exhibition of Inventions Geneva. We were delighted that our institution's first attendance at this acclaimed event was so successful, with our 19 teams collecting 20 awards for their inventions. Other breakthroughs this year include a mobile app that helps find missing dementia patients through crowdsourcing and Bluetooth positioning technology as well as an extreme rainstorm database to boost insights for flood preparedness.

It is also delightful to see the significant societal impacts resulting from our holistic knowledge transfer ecosystem. Our comprehensive support helps students and faculty move their research breakthroughs from lab to market and champions the entrepreneurial spirit. Indeed, as the first university in Hong Kong to emphasize campus-wide entrepreneurship, the HKUST community has been incredibly successful: over 1,700 active start-ups have been founded, including nine unicorns and 11 exits (i.e. IPOs or mergers and acquisitions), which generated over HK\$400 billion in economic impact as of June 2023.

Expansion of Our Footprint

To further energize our contributions to innovation and technology, considerable development at our Clear Water Bay campus is underway or planned. In November 2022,



we held a groundbreaking ceremony for the Martin Ka Shing Lee Innovation Building: a state-of-the-art facility that will expand opportunities for cross-disciplinary and collaborative research in areas ranging from robotics and AI to sustainable living and health science. Other infrastructure upgrades include a high-performance computational facility to support big data and AI research, and two additional research buildings: one focused on life and chemical sciences and technologies, and the other on physical sciences and related technologies. All will significantly elevate existing research capabilities.

Together with the growth of facilities on campus, we have expanded HKUST's footprint through collaborations and alliances both nationally and internationally. In 2022-23, the University received numerous mainland delegations and visits from leading research universities and government bodies, including the Hong Kong and Macao Affairs Office of the State Council. Memoranda of Understanding with mainland public organizations and industry will further foster cooperative undertakings. HKUST now has 315 global partnerships. This year, we were honored to be accorded the Executive Presidency of the 15-member Asian Universities Alliance in 2023-24 and chair the 17-member Association of East Asian Research Universities for 2024 and 2025. Meanwhile, our ongoing participation in leading platforms, such as the World Economic Forum, is reinforcing the University's thought leadership to shape critical global agendas.

Ready for the Future

We are looking toward the realization of the multifaceted HKUST 3.0 Vision Plan, with many more exhilarating and meaningful advances in store. In particular, we are working toward the establishment of the HKUST Innovation and Technology Park (USTInnoTech Park), which will enhance the real-world actualization of academic research

outcomes and foster industry partnerships. We are also striving to establish a third medical school in Hong Kong to nurture future-ready physicians and address local healthcare demands against the backdrop of Hong Kong's aging population. We are also working hard to secure additional land near our Clear Water Bay Campus.

Another priority is to foster empathy and compassion by creating avenues to strengthen the humanities on campus and promote the fusion of humanities and innovation through novel academic programs, such as Sports Tech@HKUST and Art Tech@HKUST. Such initiatives will enable us to create societal impacts and sustain an inclusive, supportive environment where the entire HKUST community can thrive. Our launch of the University Anthem in three languages earlier this year is an example of how we can celebrate our shared identity and build a strong sense of belonging.

To ensure the success of various initiatives and developments, we have intensified fundraising efforts to secure major donations from both the public and private sectors. Accordingly, we have received substantial donation pledges, reaching the HK\$500 million ceiling of the Research Matching Grant Scheme. We also nurtured relationships with alumni and potential donors.

Overall, we will persist in setting the pace as a globally leading institution of higher education and research by leveraging our strengths in science and innovation to actively propel Hong Kong's development into an international innovation and technology hub. I look forward to working closely with all members of the HKUST community to reach new heights of excellence in the exciting times ahead.

President
Prof. Nancy Y. IP
SBS, BBS, MH, JP

UNIVERSITY
Management



Prof. Nancy Y. IP
President



Prof. GUO Yike
Provost



Prof. Tim CHENG Kwang-Ting
Vice-President for
Research and Development



Prof. PONG Ting-Chuen
Vice-President for
Administration and Business



Prof. WANG Yang
Vice-President for
Institutional Advancement

HIGHLIGHTS of the Year

Leadership Changes Bring Installation of First Woman President

Prof. Nancy Y. IP (second right) was installed as HKUST's fifth President on November 26, 2022, becoming the first woman to head a University Grants Committee-supported institution. Other major leadership changes included the appointment of Prof. Harry SHUM Heung-Yeung (second left) as Council Chairman, succeeding Dr. Andrew LIAO Cheung-sing (first right) in March 2023. Meanwhile, Dr. Liao was appointed Chairman of the HKUST Court, replacing Dr. John CHAN Cho-Chak (first left), who has become Pro-Chancellor.



HKUST(GZ) Celebrates Opening

HKUST(GZ) held a memorable opening ceremony on September 1, 2022, marking a milestone in the University's 30-year history and ushering in HKUST 2.0 at both campuses. Under the "Unified HKUST, Complementary Campuses" framework, the two campuses are working synergistically together through close collaboration on academic programs, research, and facilities to nurture future-ready innovative talents.



University Anthem Fosters Togetherness

HKUST premiered the university anthem on March 31, 2023. Jointly originated by the University community and supporters, the anthem embodies the spirit and core values of HKUST, fostering a strong sense of belonging.

Government Delegation Visits HKUST

Mr. XIA Baolong, Director of the Hong Kong and Macao Affairs Office of the State Council, along with HKSAR Chief Executive the Honorable John LEE Ka-Chiu and Secretary for Education, Dr. CHOI Yuk-Lin, met with our students and faculty for a dialogue on various topics during a tour of our Clear Water Bay campus in April 2023.



Photo: Information Services Department, HKSAR

Awards & Recognitions



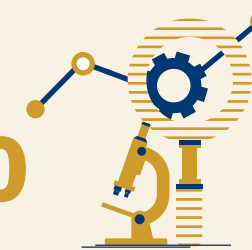
University Sweeps 20 Awards at the 48th International Exhibition of Inventions Geneva

HKUST achieved a remarkable outcome at the 48th International Exhibition of Inventions Geneva in April 2023, when all of the 19 teams in the University delegation secured accolades, receiving a total of 20 awards. Winning projects ranged from cell therapy, histological imaging, and nanomembrane materials to metal 3D printing for industry.



12x
World's No.1
EMBA
by Financial Times in 2023

World's No.2
Young University
by Times Higher Education in 2023



Top 50
Research
Organizations

Most Often Cited by the Top 100
Global Innovators for 2023
by Clarivate

Research & Innovation



Early Risk Forecasting for Alzheimer's Disease

Researchers led by President Nancy Y. IP (center, front row), in collaboration with Chair Professor and Director of the HKUST Big Data Institute Prof. CHEN Lei (second left, front row), developed an AI-based model that uses genetic information to predict an individual's risk of developing Alzheimer's disease well before symptoms occur.

Healthy Aging Boost through Innovative Polymer Technologies

Prof. CHAU Ying (Chemical and Biological Engineering) (second left) and her team developed innovative polymer technologies to address three chronic conditions prevalent among the elderly: dry eye disease, macular degeneration, and knee osteoarthritis. Their pioneering work received a Gold Medal with Congratulations of the Jury at the 48th International Exhibition of Inventions Geneva.



Insights on Flood Preparedness from High-Resolution Rainstorm Database

Prof. LU Mengqian (Civil and Environmental Engineering) and her team developed a database of mesoscale convective systems (MCS) to analyze heavy rainstorms and flood risks in eastern China. The database enables fresh insights for flash flood preparedness, adaptive measures, and weather simulations in the region.

Analyzing Market Sentiment with AI

Prof. Allen HUANG (Accounting) (left) and Prof. YANG Yi (Information Systems, Business Statistics and Operations Management) developed FinSent, a free web portal that uses financial sentiment analysis to track sentiment in financial reports and earnings calls of listed companies in the US and Hong Kong. FinSent offers investors a new perspective beyond financial information.



Internationalization



Thought Leaders Share Tech Insights at Summer Davos

In June 2023, five distinguished faculty members took center stage at the World Economic Forum's 14th Annual Meeting of the New Champions (Summer Davos) in Tianjin, addressing diverse challenges from healthcare and well-being to economic growth and innovation's role in improving people's lives.

(Photo: The World Economic Forum)

HKUST Co-Hosts Needham Conference

HKUST jointly hosted a conference with the Joseph Needham Foundation for Science and Civilisation in March 2023. The gathering featured 20 leading scholars from institutions in over 10 countries and regions, who explored how international exchange has influenced the development of science over thousands of years.



Strengthening Connections through Academic Alliances

HKUST's global partnerships have grown to 315 over the year. As a member of various academic alliances including the Asian Universities Alliance (AUA) and the Association of Pacific Rim Universities (APRU), we participated in numerous meetings with overseas institutions to share knowledge and best practices for advancing learning and research, as well as co-hosting various students enrichment programs.

Employable Graduates



HKUST Graduates Rank First in Hong Kong in Employability Ranking

HKUST remains top in Hong Kong in the Times Higher Education Global University Employability Ranking 2023-24. Meanwhile, Career Mosaic, the campus-wide face-to-face job fair, resumed. Hundreds of employers joined the event, opening up potential graduate jobs and internships over a wide range of industries.

Sustainability Commitment



ESG Investment Policy Boost for Net-Zero Carbon Goal

HKUST became the first university in Hong Kong to pledge the elimination of investments in fossil fuels in its updated environmental, social, and governance (ESG) policy, announced in December 2022. This initiative manifests HKUST's commitment to be a sustainability leader across the region and beyond.

Shaw Auditorium Honored for Sustainable Design

The eco-friendly Shaw Auditorium was recognized with prestigious accolades, including a merit in the Quality Building Award and the highest level of Hong Kong's green building certification system with a platinum rating in HK BEAM Plus. Home to various cultural activities and community events, the state-of-the-art venue is conducive to a holistic education experience that nurtures students' creativity.



Joint Government and Academia Endeavor to Develop Smog Control Strategies

Research teams from HKUST, CUHK, CityU and PolyU collaborated with the HKSAR Environmental Protection Department to develop science-based regional ozone and photochemical smog control strategies. This collaboration combines multidisciplinary expertise with leading technology to improve the quantitative understanding of different emission sources and formulate effective strategies.

Technology Transfer & Entrepreneurship

Cultivating a Thriving Start-Up Ecosystem

HKUST's Industry Engagement Day in November 2022 showcased over 30 inventions, attracting investors, industry players, academics, government officials, and entrepreneurs. In May 2023, the University's first Unicorn Day brought back almost 100 home-grown innovators and drew around 600 guests from various industries and government agencies.

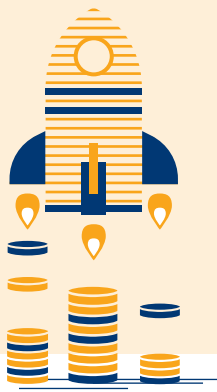


1,747 Active Start-Ups

11 Successful Exits
(9 IPOs and 2 Acquisitions)

9 Unicorns

* as of June 2023



> \$400B
Economic Impact

Empowering Students & Faculty

Embracing Generative AI

The popularization of generative AI through the release of ChatGPT in November 2022 opened up a new world of opportunities and challenges for many sectors of society, including education. Amid the debate about its use in teaching and learning, HKUST became the first university in Hong Kong to embrace the new technology and recognize its potential to transform education.



Supporting Student Well-Being

To support students in navigating challenges, close to 5,000 personal counseling sessions and special education needs (SEN) consultations were conducted over the year. Further promoting SEN-awareness, the University's SENTastic Staff Week and Award Ceremony helped to develop faculty and staff members' awareness of inclusive practices.

LEARNING for Life

HKUST has been ahead of the curve in integrating the latest technologies into education, designing future-oriented curricula, and nurturing trailblazers with a global outlook.

Generative AI for Generation AI

Committed to innovation in this technology-rich era, the University stays abreast of leading educational advances to nurture next-generation leaders. Over 2022-23, we adopted generative artificial intelligence (AI) and mixed reality applications, supporting the development of inspirational pedagogies with new policies, training, and resources.

During the year, we became the first university in Hong Kong to embrace generative AI for teaching and learning, as mass adoption of these tools surged globally. Generative AI tools, such as ChatGPT, were made available to the University community, including students, to support their learning.

1st
University
in Hong Kong
to Embrace Generative AI



In February and March 2023, the University organized a series of workshops and issued guidelines respectively to train over 360 faculty and teaching staff on the use of generative AI tools in teaching. The workshops addressed critical topics such as academic integrity, assessment design, overall educational experience, and ethical considerations, while the guidelines provided faculty with the flexibility to permit students to use generative AI in assignments, either freely or conditionally, based on individual course requirements.

The Education and Generative AI Fund was also established to encourage our educators to explore novel ideas and build best practices for using generative AI tools in their classes. The fund promotes innovation in curriculum design and seeks to develop new assessment methods. Thirteen projects received funding in the first call for proposals.



In addition to generative AI, metaverse platform Spatial.io was employed in an engineering team design experience Common Core course, challenging students from various Schools and disciplines to think out of the box in envisioning HKUST in 2050.

New Programs to Unleash Multidimensional Talents

On the curriculum front, HKUST opportunely initiates programs to meet the changing needs of society and to ensure our graduates remain at the forefront of trends.

In Fall 2022, we kicked off a progressive three-tier, 30-credit Common Core Program for undergraduates admitted in 2022-23 academic year and beyond. Now grouped into Foundations, Broadening, and Experiencing levels, the courses aim to deepen the integration of interdisciplinary and experiential learning, broadening the types of learning experiences for students. Within this new framework, we introduced two courses aimed at equipping students with the core skillsets and mindsets essential for their studies. One focuses on Habits, Mindsets, and Wellness, tailored to first-year students, and the other emphasizes Critical Thinking and Data Literacy, which students can elect to take at any stage of their studies.



Keeping our students ahead of emerging trends, the first BSc in Sustainable and Green Finance in Hong Kong was launched in Fall 2022. This trailblazing program equips students with a cross-disciplinary understanding of climate, environmental, social and governance (ESG), finance, risk management, and other vital areas.

Concurrently, we introduced an Extended Major in Digital Media and Creative Arts, which merges technical and artistic domains of media production, equipping students with skills in up-to-date creative technologies like animation, mobile media, and interactive installations. Additionally, the inception of a Minor in Smart City will augment students' major studies by offering forward-looking insights into urban planning and construction automation.



At the postgraduate level, the following programs were approved during the year, with the first students admitted in 2023-24:

MSc in Biomolecular Engineering and Health Informatics

Integrates biomolecular engineering and data analytics, providing students with the skills and knowledge in both fields to address contemporary healthcare needs and bioengineering challenges.

Dual Master Degree Program in Global Marine Resources Management with the University of Southampton

One-year program, offered in partnership with the UK university and providing cross-disciplinary knowledge and multinational experience to tackle complex marine sustainability issues. Students will study at both universities in person, earning dual qualifications.

MSc in Marketing

Furnishes students with the prevailing marketing knowledge, analytical tools, and decision frameworks to become responsible, leading marketing professionals.

ASTRI WORK-STUDY Programme (PhD)

This work-study program offered with Hong Kong Applied Science and Technology Research Institute fosters the growth of advanced I&T research talent in areas such as AI, big data, and wireless communications.

Unique Experience of Cross-Campus Learning

As HKUST embarked on a new growth phase with the opening of HKUST(GZ) in September 2022, a cross-campus study arrangement for postgraduate students was implemented. This initiative aimed to facilitate learning and research activities across the Clear Water Bay and Guangzhou campuses, accelerating the synergy of the “Unified HKUST, Complementary Campuses” concept.

The launch of the innovative Redbird MPhil Program at HKUST(GZ) over 2022-23 exemplifies our commitment to transdisciplinary education. The program targets solutions for three major global issues – health, sustainability, and smart manufacturing. By adopting a student growth-centered model that emphasizes project-based learning, it elevates students' transferable skills and potential for innovation.



Nurturing an International Perspective

With the COVID-19 pandemic petered out and the lifting of travel restrictions in Hong Kong, our global exchanges returned to full swing, with around 800 HKUST students taking part in outbound exchange and another 240 students studying abroad over the year. Extending connectivity opportunities further, HKUST signed university-wide exchange agreements with the University of Hawai'i at Mānoa (US), University of Tsukuba (Japan), Utrecht University (The Netherlands), and Erasmus University Rotterdam (The Netherlands). By June 2023, the total number of exchange partners stood at over 240. Around 600 inbound exchange students attended HKUST over the year.



To further internationalize our campus environment, we widened our non-local student recruitment efforts in 2022-23 to diversify our undergraduate student body. In addition to online campaigns, our outreach team visited high schools and/or held public sessions in 37 cities across 23 mainland provinces and municipalities, participated in an education fair in Taiwan, and gave admissions talks and/or joined conferences in 30 cities across 14 countries in Asia, Europe, and Africa. We also collaborated with a sister university to co-host the first post-COVID-19 counselor fly-in event that welcomed 40 high school counselors from 15 countries, offering them a unique opportunity to visit HKUST and learn about our undergraduate programs.

For prospective postgraduate students, we hosted a virtual fair showcasing MPhil and PhD programs offered by HKUST and HKUST(GZ), providing essential admission information to about 1,800 participants from over 80 countries.

Enhancing Holistic Learning and Well-Being

Devoted to whole-person education, HKUST continued to offer a wide range of non-academic opportunities to help students realize their potential in different areas.

Among them, the full resumption of sporting activities after the pandemic saw our top athletes compete locally and internationally, while recreational sports added to campus camaraderie. During the year, we provided advice and funding support to close to 600 student athletes across 53 sports teams. They excelled in events such as the Hong Kong Universities Rowing Championships, cross-country run, dragon boat, soccer and squash competitions organized by University Sports Federation of Hong Kong (USFHK), China.



To build up leadership competency among the young generation, we sent our student organizations' office bearers to a training exchange in Singapore in June 2023. Additionally, programs such as Self-Leadership, Ripples Fellowship, and The Next Changemaker helped 100 students explore self-discovery and leadership.

The promotion of well-being was another focus of the University's student support efforts. Over the year, we held nearly 5,000 counseling and special educational needs (SEN) sessions and 130 wellness activities, reaching over 7,400 students.

To encourage peer support, the Peer Companions service continued to empower students to help others. During the year, an expanded contingent of 206 trained volunteers provided face-to-face chat services to 250 (+29%) of their fellow students. For those who preferred seeking support online, a digital social platform with mental health toolkits and peer sharing in theme-based social rooms was in place, benefitting 1,165 (+17%) users.

Empowering Student Success with Scholarships and Financial Aid

HKUST offers a variety of scholarships to honor students' academic and non-academic merits. It also supports students' applications for externally funded awards. Over the year, scholarships totaling over HK\$104 million recognized thousands of our undergraduates and postgraduates' achievements in various fields. Recipients and awards both increased by 18%, while the total scholarship amount rose 9% year-on-year.

Number of Scholarship Recipients

2,727

18%
year-on-year



Total Scholarship Amount

\$104.4M

9%
year-on-year

As an indication of HKUST's research renown, the University again attracted the highest number of Hong Kong PhD Fellowship Scheme awardees in 2023-24 among the eight local University Grants Committee (UGC)-funded institutions. Some 78 top-quality students from 16 countries and regions will start their doctoral studies at HKUST in 2023-24, equivalent to 26% of the scheme's total awards for the year.

To encourage next-generation scholars to explore research environments and life beyond Hong Kong, we presented the Overseas Research Award to 41 PhD students in the year. Institutions offering research experience include Harvard University, the Swiss Federal Institute of Technology, and the National University of Singapore. Agreements on postgraduate dual degree programs, joint PhD training programs and student exchanges were entered into or renewed with 11 universities and research institutes around the world.



In August 2022, the University co-hosted a two-week summer program in collaboration with Bai Xian Asia Institute, a non-profit dedicated to promoting cross-cultural education. The program engaged around 50 Asian Future Leaders Scholarship awardees from over 10 Asian countries and regions, including those from HKUST and seven partner universities, to explore artificial intelligence applications and discuss issues in East Asia under the theme of “The Age of Disruptive Innovation”.

To assist needy students, a total of HK\$7.6 million in bursaries and loans was provided to those facing financial constraints or unforeseen emergencies. A work-study program was introduced, offering on-campus internship opportunities with aid provided on a dollar-to-dollar matching basis. The program had extended around HK\$300,000 in financial support by June 2023. There was also a notable increase in financial support for students with difficulties in seeking mental healthcare.

1,900
Career
Consultations
in 2022-23

Gaining a Head Start on Career Options

University advisors and alumni held a record 1,900 career consultations in 2022-23, and at the same time extended our service provision to prepare students for employment. HKUST pioneered a Hong Kong-first career support program on design thinking to help students prepare for challenges in the workplace and find their ways to professional and personal fulfilments. We also launched a pilot “Ask Me Anything” chat series for faculty-student advising. About 50 alumni across various industries offered career guidance to current students in one-on-one sessions.

Our students’ interest in early work experience was evident in the high participation in the government-supported science, technology, engineering, and mathematics (STEM) internship scheme, attracting a

record 942 interns from HKUST and disbursing HK\$20 million, contributing to over 22% of the total funding for all Hong Kong universities. Industry collaborations also provided numerous internship opportunities.

This combination of guidance, real-world experience, and our student-focused programs makes our graduates highly desirable to employers. In 2023, HKUST ranked

29th globally in the Emerging/Times Higher Education Global University Employability Ranking and 3rd in Greater China.

Fostering an Entrepreneurial Mindset

For students aspiring to launch their own businesses, HKUST’s robust entrepreneurship and start-up ecosystem provided substantial support throughout 2022-23:

ENTREPRENEURSHIP CENTER in Action

Advice and Experience-Sharing

MentorHUB@HKUST, a platform fostering real-time feedback and timely results for early-stage start-ups, enabled mentors and mentees to seamlessly connect. In 2022-23, MentorHUB drew 24 mentors and over 460 mentees from 177 start-ups across 10 sectors and industries.

Work Space

theBASE serves as a dynamic co-working space and multifunctional area for meetings, demonstrations, and events, fostering idea exchange, team-building, and networking. Key events over the year included Startup Runway 2022, Info Day@theBASE 2022, and various entrepreneurship talks.

Business Know-How and Promotion

The Entrepreneurship Center ran 29 workshops covering idea generation, business planning, marketing, finance, and legal issues, among others. Together with the Office of Knowledge Transfer, it also supported the participation of over 70 start-ups in 10 diverse exhibitions to showcase the companies and connect with investors.

This year, our flagship HKUST-Sino One Million Dollar Entrepreneurship Competition 2023 drew a record 234 teams from the HKUST community, the Mainland, and abroad. Allegrow Biotech Ltd. received the Platinum Award for its affordable artificial cell cultivation technology, enhancing accessibility to cell therapy for autoimmune diseases and cancer. The team will compete in the 2023 Grand Final against winners from Beijing, Foshan, Guangzhou, Macao, and Shenzhen. The annual event also introduced the Sustainability Impact Awards this year, a new honor dedicated to recognizing outstanding performance in the areas of ESG.

HKUST members’ interest and strong entrepreneurial capabilities were also on display at Hong Kong Techathon 2023, where they constituted 38% of the 945 participants. The event, jointly organized by HKUST,

eight other local universities and Hong Kong Science and Technology Parks Corporation, provided a week-long platform for programmers, engineers, designers, marketers, and entrepreneurs to develop ideas and prototypes and pitch for seed funding and incubation. Ten HKUST teams won a total of 11 awards for their novel projects, the most for an individual institution.



LAB to Market



HKUST is a vibrant hub of innovation, nurturing ideas that have the power to transform lives. During 2022-23, we made significant contributions to society through transformative breakthroughs in a variety of fields, including marine science, healthcare, robotics, smart manufacturing, and sports science and technology.

Powering Innovation

Fuelling Influential Breakthroughs

Committed to generating transformative knowledge and societal innovations, HKUST continuously pioneers research that improves our lives. Throughout the year, our dedicated faculty and their teams have garnered recognition in competitive funding exercises, supporting 1,572 new and on-going research projects with a total of HK\$956 million. This support provides crucial resources that underscore the extensive and beneficial impact of our research, touching various facets of society.

Highlights of some major projects that drew support in 2022-23 are:

Sponsor: Research Grants Council (RGC)

Areas of Excellence | 1 project

A study to develop **6G theories and technologies** for growing mobile data internet of everything, and related services. The project also aims to shape Hong Kong's leadership in 6G through policy-making.

Collaborative Research Fund | 10 projects

Among the 10 projects, one is creating a **city-scale LiDAR network** to measure Hong Kong's wind environment, which will inform urban planning. Another was funded by a Collaborative Research Fund (CRF) equipment grant which allowed the introduction of **a state-of-the-art spectrometer for environmental monitoring**. Other areas of study included magnetic materials, novel antibiotics, antiviral self-cleaning surfaces, and gas fuel storage.

NSFC and RGC Collaborative Research Scheme | 4 projects

A new joint scheme initiated by the National Natural Science Foundation of China (NSFC) and the RGC will support four research projects on **robotics, next-generation wireless networks, solid-state lithium batteries, and diffuse gliomas** respectively.

External Funding Totaling

\$956M



Granted to

1,572 Projects

Research Impact Fund | 1 project

Research to establish an AI platform for precision neuro-oncology to provide a more efficient and standardized procedure for **brain cancer diagnosis, prognosis, and intervention**.

Sponsor: Innovation and Technology Commission (ITC)

Innovation and Technology Support Programme, Partnership Research Programme, and others | 28 projects

Among the projects are the construction of **an intelligent robotic technology** to mimic how humans work in a factory and move to any location for a task, and the invention of **particulate air filters** to be used in air purifiers and ventilation devices.

Sponsor: Hong Kong Sports Institute

Sports Science and Research Funding Scheme | 1 project

Novel technologies to push the performance boundaries of elite athletes including a real-time onboard sensor system for windsurfing performance analysis and strategizing, and an aerodynamic and motion sensor system for cyclists recording wind speed and direction, bike motion, and posture.

Sponsor: The Croucher Foundation

Croucher Tak Wah Mak
Innovation Award, Croucher
Senior Research Fellowship | 2 projects

Two physics faculty will respectively address: **energy-efficient electronic devices** and new types of **quantum computer**; and metamaterials with potential use in **highly sensitive sensors for communications and novel quantum imaging**.

Mainland Support

Ministry of Science and
Technology (MOST),
National Natural Science
Foundation of China (NSFC) | 44 projects

HKUST continued to obtain substantial research funding from a host of mainland bodies in 2022-23, including a study on **numerical algorithm development and application** funded by the MOST and a project on **random matrix theory and its application** in statistics funded by the NSFC.

In addition to national funding, our researchers received support from Guangzhou Economic and Technological Development Zone, Shenzhen Science and Technology Innovation Committee, and Huawei Technologies on various projects.



New Initiatives to Bolster Multidisciplinary
Research Capabilities

In addition to securing external funding, we also launched new internal initiatives to give our scholars a shot in the arm. These include the 30 for 30 Research Initiative Scheme, with HK\$30 million set aside to support high-impact, multidisciplinary research efforts. To further promote the application of HKUST research and development outcomes, the University has also allocated HK\$8 million to the Frontier Technology Research for Joint Institutes with Industry Scheme. The initiative will support research projects with good commercialization potential and industry impact.

Research Hubs and Next-Level
Infrastructure to Spur Discoveries

In our ongoing mission to push the boundaries of knowledge and support our researchers in making influential scientific and technological discoveries, we have expanded our portfolio of research hubs and bolstered our research infrastructure.

Adding to our existing array of institutes, centers and joint laboratories, seven further research units were approved for establishment over 2022-23 to drive innovative solutions in strategic research areas. Some resulted from Memoranda of Understanding (MoU) with partners from different sectors, embodying the University's commitment to knowledge transfer through academic-industry collaboration.

- Greater Eurasia Research Center
- Center for Smart Manufacturing
- PIESAT Center for Remote Sensing Application Research
- HKUST-HKSI Joint Center for Sports Science and Technology
- HKUST-KF Joint Laboratory for Sustainable Technologies
- HKUST-China Unicom Joint Laboratory on Smart Society
- HKUST-China Resources Joint Center on Brain Science

In a major development of campus infrastructure to support research, the University broke ground on the Martin Ka Shing Lee Innovation Building in November 2022. Adding state-of-the-art facilities in science and engineering, the project is expected to be completed at the end of 2025. Supported by a generous donation of HK\$150 million from Dr. Martin LEE Ka-Shing, the eight-story building is constructed with green materials (Sustainable Horizons, P.50). Laboratories will cover robotics, AI, data science, sustainable living, and health science, among others.

Further funding was approved for another research building to provide additional space for research and development in life and chemical sciences and technologies, with construction scheduled to commence in the fourth quarter of 2023 and completion expected by the third quarter of 2026. Design is underway for a third new research building. Upon the completion of all three buildings, the total research lab space of the University will be expanded by approximately 30%.



Fostering Knowledge Transfer

Knowledge transfer is a crucial part of the innovation ecosystem, enabling research to directly benefit society. Alongside world-class facilities and an inspirational environment for our talents to achieve research excellence, HKUST provides a comprehensive knowledge transfer system, propelling forward economic and social development through the transfer of new technologies from research to practical applications. Such efforts range from securing patents and licensing of intellectual property (IP) to vitalizing HKUST start-ups and industry.

Applying Technology Through Entrepreneurship

As Hong Kong's first university to invest in entrepreneurship, HKUST spares no effort in knowledge transfer via commercialization of research outputs. During the year, six HKUST start-ups were featured in the Forbes Asia 100 to Watch 2022 List, making it the only university in Asia to be included.



SPOTLIGHT on High-Impact Sustainability Research



The University fully recognizes the pressing need for research-driven solutions to sustainability, a key theme in our Strategic Plan 2021-2028 and a reflection of our commitment to the global Sustainable Development Goals. Over 2022-23, we made significant strides toward this objective with a host of related research developments. Some of them included:

- A project that aims to devise a planning model for Hong Kong's electric vehicle charging infrastructure. Using optimization algorithms and spatial econometric models, the initiative will formulate a year-by-year plan to establish charging stations over the next five years.

- Upgrading the WavyOcean online marine environmental visualization platform from 2D to 3D, for marine management in Hong Kong, the Greater Bay Area, China Seas, and Western Pacific.
- Launch of the Green Sustainability Open Lab by HKUST Shenzhen-Hong Kong Collaborative Innovation Research Institute, Shui On Xintiandi and its InnoSpace GBA incubator.
- Establishment of the Data Analytics for Sustainable Development Lab to devise novel ways to achieve sustainability in data center management.

Our Sustainable Smart Campus as a Living Lab initiative has been supporting HKUST students, staff, faculty, alumni, and strategic partners in testing out sustainable and smart ideas on campus before implementing them in society. For details of the projects launched over 2022-23, please refer to the Sustainable Horizons chapter P.48-49.



6 HKUST-Affiliated Start-Ups Named Forbes Asia 100 to Watch 2022 List

DimOrder

Magnum Research

Point Fit Technology

Atom Semiconductor Technologies

Gense Technologies

Opharmic Technology

Such achievement was made possible by the University's efforts to support entrepreneurship on all fronts. In the year 2022-23, a total of 43 HKUST-related start-ups were recommended for funding under the HKSAR Government's Technology Start-Up Support Scheme for Universities (TSSSU). They included both applications for an original version of the scheme which had been in place since 2014, and a newly enhanced measure that provides dollar-for-dollar matching funds to encourage technology start-ups to raise fund from the private sector alongside.

The HKUST Entrepreneurship Fund (E-Fund) continued to foster emerging businesses as well as raise investor awareness. There are currently 34 Co-Investment Partners (20 in 2021-22) managing an investment pool of more than US\$32 billion and investing approximately HK\$25 million in E-Fund portfolio companies. Following E-Fund initial investment in December 2019, portfolio companies have successfully raised over HK\$191.5 million in subsequent funding rounds.

Bridging Industry and Breakthroughs

Financial support aside, we also provided start-ups with the avenues to foster relationships with stakeholders and potential beneficiaries. The year 2022-23 saw a myriad of flagship HKUST events including the Industry Engagement Day series, attended by over one thousand industry players, potential investors, academics, government officials and entrepreneurs, and the HKUST Unicorn Day, which drew nearly 100 alumni-entrepreneurs back to their alma mater.

91 DeepTech Start-Ups



Utilizing Licensed HKUST Technologies

1,747 Active Start-Ups Including



11 Successful Exits (9 IPOs and 2 Acquisitions)



9 Unicorns

* as of June 2023

The year also brought the launch of the HKUST Founder's Club, where young graduates at the early stage of their entrepreneurship can be connected up with innovators, industry, government, and investors. Selected start-ups, small and medium-sized enterprises (SMEs) as well as DeepTech companies founded by HKUST members will receive entrepreneurship training, potential investment opportunities, business matching services and R&D collaboration opportunities with HKUST academics. The Club aims not only to channel resources to HKUST companies, but also to lead the way in developing Hong Kong's entrepreneurial culture.

Boosting Start-Ups with Intellectual Property

As a testament to our strength in generating original research that spurs practical innovations, the University achieved record-breaking intellectual property and licensing outcomes over 2022-23. Ranking No.1 in China and No.33 globally under the patent influence metric of the Nature Index (2022), HKUST is making a growing economic and societal impact through its licensed technologies.

A Record
173
Active License
Agreements
= All-Time High Income of
\$13.1M

No.1
in Hong Kong Industry
Income Index 2023
(Times Higher Education)



To further support our members' entrepreneurial journeys, we have been implementing the HKUST IP Policy 3.0 since March 2023. Measures include an increase in commercialization revenues to creators from 10%-50% to 70%, enhancing affiliated start-ups' competitiveness and fortifying their financial stability.

In December 2022, we launched the Technology Adoption Program to make our IP technology portfolio more accessible to a wider range of businesses and organizations (start-ups, NGOs, SMEs, multinationals)

20 AWARDS at Geneva Inventions Exhibition Debut

In April 2023, HKUST made its first institutional appearance at the International Exhibition of Inventions Geneva with 19 University teams participating and collecting 20 awards. Projects on display ranged from Alzheimer's disease assessment, advanced polymer-based therapeutics for chronic disease, to metal 3D printing for manufacturing. Accolades included one Prize of the Chinese Delegation for Invention and Innovation, and three gold medals with congratulations of the jury.



by offering upfront free licenses for selected mature granted patents. Alongside, the Express Licensing Platform is now providing an online marketplace to promote HKUST software to start-ups and industry partners, considerably shortening the licensing process for such technologies.

226
Inventions
Disclosures Received



Driving Innovations Across Borders

Beyond Hong Kong, our several mainland platforms have been advancing the University's research and knowledge transfer efforts, helping expand the footprint of our inventions.

Over 2022-23, the University's Blue Bay Incubator in Shenzhen incubated 37 companies, taking the cumulative total to 147. Such achievement indicated the effectiveness of HKUST's entrepreneurial ecosystem and its important role in generating Greater Bay Area innovation.

Among the start-ups founded in the past year, 10 were valued at more than RMB100 million. A total of 150 IP rights applications were made.

HKUST Shenzhen Research Institute, a key mainland platform for the development of Shenzhen and Hong Kong, received three Natural Science Awards for its leading-edge discoveries, including one Second Class Guangdong Province Natural Science Award and two Second Class Shenzhen Natural Science Awards. Adding to the University's presence in the Greater Bay Area, HKUST Shenzhen-Hong Kong Collaborative Innovation Research Institute received approval in July 2022 to become a supporting institution from Guangdong Basic and Applied Basic Research Foundation Support Organization.

345 **288**
IP Filed Granted
85
New IP Utilized

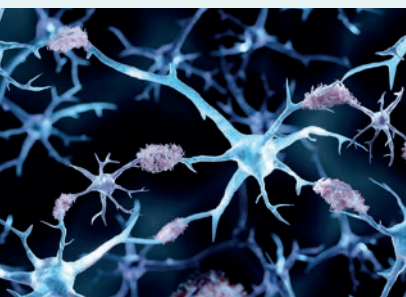
533/1,603
Patents
Owned by HKUST's
Clear Water Bay Campus
Being Utilized (33%)



RESEARCH Excellence

Blood Protein Discovery Unveils Promising Pathways to Combat Alzheimer's Disease

A groundbreaking discovery by an international research team, led by HKUST President Prof. Nancy Y. IP (Life Science), has shed light on a blood protein called soluble ST2 (sST2) that plays a pivotal role in the development of Alzheimer's disease. With over 30 million people globally affected by this debilitating form of dementia and no effective treatment available, these findings have the potential to revolutionize our understanding of the disease. The research has unraveled the intricate mechanisms through which genetic factors regulate levels of the blood protein, offering new avenues for early diagnosis and treatment strategies. These breakthroughs pave the way for simpler and safer alternatives to current brain-targeting methods, bringing hope to millions of individuals impacted by Alzheimer's disease.



Synthesis Method Helps Fight Against Superbugs

To tackle the threat of antibiotic-resistant bacteria and superbugs, Prof. TONG Rongbiao (Chemistry) and his team developed the world's most efficient method for synthesizing anthracimycins, a promising antibiotic discovered in an ocean microbe a decade ago. Their 10-step method produces 63 times more anthracimycin than the previous method, reducing costs by using fewer reagents and solvents. Despite these changes, the synthesized antibiotic retains potency comparable to natural antibiotics. This breakthrough could help address the urgent need for new antibiotics amidst a global healthcare crisis caused by rapidly emerging resistant bacteria.

Multiscale Modeling and Computation Paves Way for Advances in Space and Energy Explorations

Prof. XU Kun (Mathematics), an expert in Computational Fluid Dynamics, has made significant strides in advancing the Unified Gas-Kinetic Scheme (UGKS) and the Unified Gas-Kinetic Wave-Particle (UGKWP) method. These advancements have notably improved the efficiency and accuracy of simulating multiscale transports in various systems, ranging from rarefied gases and gas-solid particle two-phase flow to radiative transfer, plasma, and other materials across various regimes. These methods are expected to benefit areas such as flight aerodynamics in near-space environments, fluidization processes in chemical engineering, and the potential achievement of inertia confinement fusion for clean energy generation.

Polymer Technologies Spur Products for Healthier Aging

Prof. CHAU Ying (Chemical and Biological Engineering) has led the development of innovative polymer technologies, targeting three chronic conditions prevalent among the elderly: dry eye disease, macular degeneration, and knee osteoarthritis. By tailoring polymer materials, the team has formulated highly effective eyedrops from a super-soft hydrogel for treating dry eye disease. Additionally, they are developing two types of injectable gels for the other two conditions. This research is conducted in collaboration with Pteryon Therapeutics, a start-up co-founded by Prof. Chau and HKUST PhD graduate Dr. YU Yu.



Extreme Rainstorm Database Builds Insights on Flood Preparedness

Prof. LU Mengqian (Civil and Environmental Engineering) and her team have created a high-resolution, long-term database of mesoscale convective systems (MCS) to comprehensively depict the physical properties of heavy rainstorms and associated flood risks in eastern China, a global hotspot for extreme rain and floods. Through a hybrid tracking algorithm and high-resolution (4km, half-hourly) satellite data, the researchers uncovered a "dual regime", where MCS exhibit contrasting properties in winter and summer. The study provides valuable insights for flash flood preparedness, adaptive measures, and numerical weather simulations in eastern China.



AI Guidewire Recognition Software Enhances Patients Safety

Prof. Gary CHAN (Computer Science and Engineering) and his team launched guidewire recognition and counting artificial intelligence (AI) technology that uses computer vision to enhance patient safety. The software can reduce the risk of guidewires being left in a patient's body after insertion of a central venous catheter, a common clinical procedure used to guide the placement of a catheter into a central vein to administer fluids or medication, or to monitor hemodynamic status. Currently, manual counting is used to ascertain whether all guidewires have been removed. HKUST's AI image-based "checker" system, including object recognition and data augmentation techniques, can accurately detect guidewires and cross-check the manual count in real time.

Analyzing Market Sentiment in Corporate Disclosures with Artificial Intelligence

A Fintech project, led by Prof. Allen HUANG (Accounting) and Prof. YANG Yi (Information Systems, Business Statistics and Operations Management), has developed FinSent, a free-to-use financial sentiment analysis web portal. Leveraging a deep-learning-based natural language processing model, FinSent automatically tracks sentiment in financial reports and earnings calls of listed companies in the US and Hong Kong, offering investors a new perspective to analyze listed companies beyond financial information.



Predicting Geographical Expansion of Banks

With the interaction between spatial heterogeneity (regional differences) and financial deepening (improving access to financial services) central to economic development, Prof. Ji Yan (Finance) and his co-authors have devised an equilibrium model with a geographic perspective to study economic transitions linked to bank expansion. By integrating theory with measurement and data, they have uncovered important market characteristics that predict the geographic distribution of bank branches. Their model enhances the understanding of the aggregate and distributional implications of bank expansion, as well as the spatial consequences of financial sector policies.

Widening Understanding of Family Offices in Greater China

A team from HKUST's Roger King Center for Asian Family Business and Office has set out to compile the "Landscape of Family Offices in Greater China Report" together with EY Private. The report will provide a comprehensive analysis of the current landscape for family offices in Greater China, the differences between family offices in the Mainland and Hong Kong, and the development of single and multi-family offices. Drawing on survey data collected from 160 respondents or organizations, the report will offer valuable insights for families, policymakers, and service providers in the wealth management industry.

How Wealth Conferred Elite Status in Qing China

A monograph titled *Power for a Price: The Purchase of Official Appointments in Qing China* (Harvard University Asia Center), authored by Prof. Lawrence ZHANG (Humanities), sheds new light on social mobility in late imperial China. Contrary to the traditional view that elite status was solely based on merit achieved through civil service examinations, the book reveals that wealth was the ultimate determinant of elite rank, and the purchase of degrees and offices served as significant routes to ascend into the civil service.

Novel Method for Measuring Organic Nitrogen Concentration

HKUST researchers have created a groundbreaking method to measure both inorganic and organic nitrogen in aerosol samples in one single analysis. The team, led by Prof. YU Jianzhen (Chemistry, Environment and Sustainability) and Prof. YU Xu (Environment and Sustainability), developed a new instrument coupled with a new data algorithm to study how carbon and nitrogen elements incorporated in aerosols evolve at different temperatures. This allows them to differentiate between inorganic nitrogen and organic nitrogen, based on their unique thermal evolution characteristics. The novel tool has wide potential uses, including studying the effects of atmospheric organic nitrogen on the environment and climate.



Synergizing Water-Climate Needs in Urban Wastewater Treatment

Prof. LU Zhongming (Environment and Sustainability) collaborated with researchers from the Mainland and Austria to advance China's wastewater treatment decarbonization. They studied the link between urban water stress and the greenhouse gas (GHG) emissions produced by the growing wastewater infrastructures across 300 cities on the Mainland. The team identified low-carbon technologies for urban wastewater treatment, sludge disposal and water reuse, which could help reduce both water stress and wastewater-related GHG emissions. According to their research, there's potential to further disconnect water stress mitigation from GHG emissions by 2030.



State, Society and Historical Role of Public Interest

In his book *Public Interest and State Legitimation: Early Modern England, Japan, and China* (Cambridge University Press), Prof. HE Wenkai (Social Science) showcases how a discourse of state legitimation, based on public interest, was prevalent across the three countries during the early modern period. Drawing on extensive historical scholarship and primary sources, he illustrates that this discourse served as a mutual platform for negotiation and collaboration between state and society to achieve good governance by providing public goods, such as famine relief and infrastructure. This dialogue on state legitimacy allowed a limited yet meaningful political space for the ruled.

CONNECTING

People and Communities



By supporting community service, promoting inclusivity and diversity, nurturing talents, and preserving traditional culture, HKUST adopts a multifaceted approach to improving lives both within and beyond the University community.



Uplifting Society Via Service and Sports

Driving tangible impact internationally and locally, undergraduate students from the University's Student Innovation for Global Health Technology (SIGHT) education program continued to devise innovative health technology and social solutions to diverse issues in multiple cultural and urban settings. Three projects launched in the year 2022-23 included one in Sri Lanka that addressed peacock behavior to avoid crop damage, one in Thailand aimed at capacity-building among young school dropouts, and another in Hong Kong SAR to boost dementia patients' cognitive abilities through healthy diets.

Post-pandemic, our flagship community engagement platform HKUST Connect was revived. Reigniting the "Connect for Change - Global Service Day", the program offered bonding opportunities between our campus members and the local community as well as a self-directed learning experience for students. Coinciding with Global Youth Service Day in April 2023, the initiative mobilized 400 staff and student

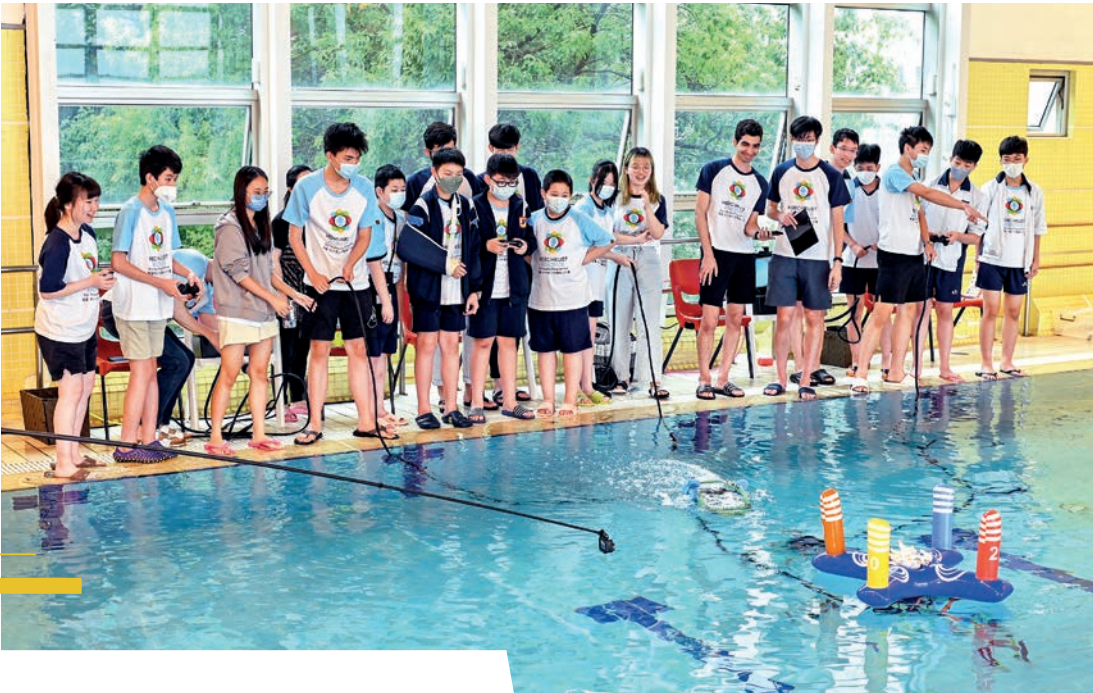
volunteers across 26 service projects ranging from food recycling to elderly care. In support of the United Nations' Sustainable Development Goals (SDGs) and to address social issues such as poverty, hunger, health, and quality education, our volunteers reached out to the homeless, underprivileged, ethnic minorities, the elderly, and children, providing them with social support and practical help.

Sport is another dynamic way the University links to society. Over the year, our Sports Tutorial Service Scheme was expanded from a campus activity to a community service. Launched in 2021 to facilitate welcoming programs for new undergraduates, the scheme has been providing sports tutorship training to senior students. From March to June 2023, our 24 student sports tutors reached out to three primary schools, bringing lively tutorial sessions in archery, fencing, korfbal, and softball to children. The initiative received a boost when it secured funding from the Whole-person Development Fund from the University Grants Committee in May. Service will be further extended to secondary schools and community centers in 2024.

Stirring Early Interest in Innovation and Technology

Committed to science, technology, engineering and math (STEM) education, HKUST joined up with Tram Plus Limited to launch a special program that gave local primary and secondary school students an early taste of engineering training. By providing lectures on multi-3D modeling, the program helped children and teenagers develop problem-solving abilities through design thinking. It also offered them a chance to learn more about the work of a professional engineer.

As an integral part of STEM education, HKUST also organized a series of robotics activities for younger members of the community and their teachers. A cornerstone was the Underwater Robot Competition 2023, which attracted over 600 students and teachers from 86 schools. The event, part of the HSBC/HKUST Robotics For Youths Programme, inspired our undergraduates across disciplines to mentor primary and secondary students, including those with special educational needs or disabilities, and those from ethnic minority groups or underprivileged backgrounds. Additionally, the first Robot Explorer Cup invited 110-plus students from 16 primary and secondary schools to work in teams, building robots and gaining engineering insights.

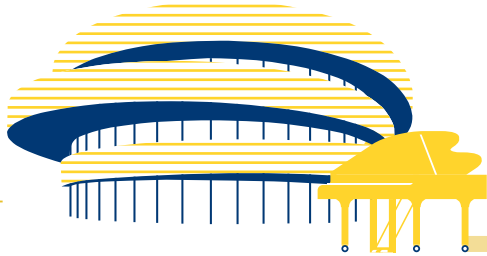


Enhancing Social Cohesion Through Arts and Heritage

Through a series of arts and cultural events, the University fostered deeper engagement with the history and cultural traditions of the wider community.

The 2022 Cosmopolis Festival, a joint effort by the School of Humanities and Social Science and Shaw Auditorium, assembled an eclectic program of sounds from the harpsichord to the Balinese gamelan, electroacoustic works, and Cantonese music, with a total of 11 events attracting over 2,000 music lovers.

Meanwhile, the South China Research Center championed regional culture through a variety of activities. These included the Hang Hau Unicorn Dance Training Workshop, a celebration of an art form on the National Intangible Cultural Heritage list, and the Tai O Fishermen Image Gallery Exhibition, which attracted 7,000 visitors eager to explore the distinctive culture and landscape of Tai O.



The Lee Shau Kee Library extended an invitation to time travel with the co-publication of *Regnum Chinae*, the first comprehensive study of Western printed maps of China up to 1735. While many of the historic maps are housed in the Library's own collection, the book was published together with the renowned Dutch publishing house Brill. In celebration of the book launch, the Library organized a public talk in October 2022 to share with readers how European maps of China had changed over time.

Amplifying Diversity and Inclusivity Awareness

Diversity is the engine of institutional growth and integral to our core values. In 2022, HKUST established the Diversity and Equal Opportunities Committee, reaffirming our commitment to a diverse, equitable, and inclusive campus. This committee will lead efforts to widen understanding, mitigate unconscious bias, and reduce all forms of discrimination and harassment via enhancing its existing mechanisms, training and education, engagement with University members, as well as external partnerships.





Our commitment to diversity was showcased when we hosted the Unity Games in January 2023, attracting 400 athletes from local universities and community sports clubs. Athletes from different ethnic groups, genders, age strata, religious and cultural backgrounds competed in squash, table tennis, and volleyball. Another highlight was a wheelchair fencing exhibition co-hosted with the Hong Kong Sports Association for the Physically Disabled in March, drawing 300 spectators to the University Atrium. Centered around the theme of equal opportunities, the University also held an International Cultural Fair and a campus market in May and June 2023 respectively.

The month-long “From Diversity to Infinity” Festival and related workshops raised awareness of special educational needs (SEN) and how to create a positive campus environment for all students. This led to the inaugural HKUST SENTastic Staff Awards, where we recognized nine staff members for their exceptional care and commitment to students’ overall well-being and individual needs.

Leadership Development for Transformative Times

Continuous learning is at the heart of our staff development and leadership culture, vital to our on-going success. A management and leadership development program was conducted to prepare senior staff for future leadership roles. Over 3,000 staff honed their skills through 50+ in-house seminars/workshops on topics from management to IT skills.

In addition, two mentoring programs were launched in June 2023 to boost professional development. Under the Pilot Staff Mentoring Program, seasoned staff members are paired up with newer colleagues to share their knowledge, insights, and organizational connections. A complementary scheme, the Redbird Staff Mentoring Program, connects participating staff with Council Members who share similar interests or fields of work. These initiatives will be instrumental in cultivating a culture of support and strengthening a sense of community among our staff.



Strengthening Bonds, Renewing Friendships

HKUST cherishes its enduring bonds with alumni and their interconnected community. Throughout the year, we focused on rekindling these connections in the post-pandemic world through a series of events. The Alumni Fun Day in September 2022, for instance, reconnected various cohorts, their families, and friends in a weekend of high-spirited on-campus activities.

Our annual Alumni Entrepreneur Reception in March 2023 proved a showcase of alumni innovation, spanning biotech, AI, fintech, and food and beverage sectors. Co-organized with the Hong Kong Science Park and HKUST Entrepreneurship Center, and with support from the HKUST Business School, this event strengthened the entrepreneurial spirit within our alumni community. Solidifying these deep-rooted ties, we welcomed the Convocation Standing Committee 2023-25 in April 2023, with entrepreneur and multi-degree alumnus Mr. Terry TSANG Kin-Chung elected as the new Convocation Chairman.



LOCAL to Global

In a transformative year for the University, we have expanded our footprint in the Greater Bay Area with the official opening of HKUST(GZ), and deepened our international partnerships through contributions to alliances and thought leadership platforms.



Mainland Footprint

Opening of HKUST(GZ) Marks New Era

The University celebrated a milestone in its history with the official opening of HKUST(GZ) in Nansha, Guangzhou, on September 1, 2022. It signified the start of the “HKUST 2.0” era under the pioneering “Unified HKUST, Complementary Campuses” framework, with the two campuses working in concord to deepen collaboration in the Mainland and advance education, research, and knowledge transfer in the Greater Bay Area (GBA) and beyond.

Since the Ministry of Education approved the establishment of HKUST(GZ) in June 2022, the campus has been on a fast track for growth. Within just a year,

it has secured over 100 government-funded research projects across various fields, spanning advanced materials, microelectronics, smart manufacturing, bioscience, biomedical engineering, among others. Industry partnerships are flourishing too, with over 70 alliances forged with top-tier enterprises and research institutions. These include a plan to establish a metaverse laboratory with China Mobile Group Guangzhou Branch, and a GBA green computing hub with China Telecom’s Guangdong branch.

In June 2023, HKUST and HKUST(GZ) powered up academia-industry synergy through HKUST(GZ) INNOTECH Day on our Guangzhou campus. The cross-campus initiative drew over 100 start-ups and innovation teams, as well as prospective investors, paving the way for research from both campuses to be commercialized in the GBA.

Deepening Government and Academia Engagement

From our home base in Hong Kong, we have been strengthening our ties with mainland government bodies and academic collaborators. Through hosting diverse delegations, coordinating visits, and organizing high-level events, we bolster our connections which enable us to better contribute to the growth and progress of the GBA and the country as a whole.

During the year, we welcomed three notable government delegations. Mr. XIA Baolong, Director of the Hong Kong and Macao Affairs Office of the State Council, along with HKSAR Chief Executive the Honorable John LEE Ka-chiu and Director of the Liaison Office of the Central People’s Government in HKSAR Mr. ZHENG Yanxiong, met with our students and faculty for a dialogue on various topics. Separately, a delegation headed by Vice Governor of Guangdong Mr. WANG Xi interacted with scholars of the Greater Bay Area Association of Academicians on our campus. Both groups explored our State Key Laboratory of Advanced Displays and Optoelectronics Technologies, learning about HKUST’s innovative efforts backed by national support. They also visited the Aerodynamics and Acoustics Laboratory and the State Key Laboratory of Molecular Neuroscience respectively. Furthermore, a delegation led by Guangzhou Mayor Mr. GUO Yonghang experienced a demonstration of autonomous vehicles and visited the Shaw Auditorium. These visits from central, provincial, and city officials strengthened our ties with various government bodies, creating more opportunities for HKUST to play a role in national development.

Fostering connections with our peers in the higher education sector, we hosted senior leaders from prominent mainland research universities such as Peking University, Tsinghua University, Fudan University, Nanjing University, and the University of Science and Technology of China, to create a platform for potential academic partnerships and research collaborations, such as PhD training, research symposiums, and interdisciplinary programs.

Beyond the campus, HKUST reached out to reinforce its standing as a key player in national academic affairs. Highlights in the year included our President’s two separate meetings with Mr. HUAI Jinpeng, Minister of Education, and with Mr. WANG Zhigang, Minister of Science and Technology. They discussed deepening exchanges and cooperation in research and education in the GBA, cultivating innovative talents, and supporting technological breakthroughs at HKUST.



Photo: Information Services Department, HKSAR

We also actively participate in prominent events and conferences. During the year, our President delivered keynote speeches at the Greater Bay Area Science Forum in Nansha, Guangzhou, and the Guangming Science City Forum in Shenzhen. These events brought together influential leaders, policymakers, educators, and intellectuals from around the world to discuss current challenges, identify opportunities, and explore the latest trends in scientific and technological development.

Fostering Strategic Collaboration to Propel Innovation

Adding to interconnections, HKUST signed Memoranda of Understanding (MoU) with a number of public organizations and industry partners to build strategic partnerships in various areas of research, innovation, and talent cultivation. They included:

Wuxi Economic Development Zone

Establish the Wuxi-Hong Kong Collaborative Innovation Center at HKUST to nurture research teams and groundbreaking start-ups in fields such as microelectronics, big data, cloud computing, fintech, precision medical equipment, and life and health sciences.

China Resources Research Institute of Science and Technology

Turn research breakthroughs in molecular neuroscience, sustainable development, and microelectronics into market-oriented products and services; establish a joint research center dedicated to advancing brain science.

Inspur Group

Harness the research strengths of both sides to develop high-impact innovations and commercialize research & development outcomes, utilizing patented technologies.

Alibaba Cloud

Cultivate local talents in data analytics and foster cutting-edge research in pure science, engineering, AI, and machine learning.

Supporting National Development Strategies

As part of our vision, HKUST strives to contribute to the economic and social development of the nation as a leading university in China. Such endeavors are often made in collaboration with academic and industry partners on various fronts of innovations.

Among our strategic research areas, sports science and technology coincides with the country's pledge to become a leading sports power. Joining hands with Asia Sports Tech, an Asia-based consulting firm co-founded by our alumnus, the University hosted the "Futureproofing Sports in Asia" summit in March 2023. Faculty members joined investors and start-up founders in sparking insightful dialogues on sports tech, finance, social participation, ESG, and sports evolution in the GBA.

To help Hong Kong play a more active role in the country's aerospace explorations, we convened a Space Technology Advancement and Remote Sensing Symposium in June. As a thought leadership platform, it brought together experts from Hong Kong and the Mainland across government, aerospace enterprises, and academia to address current challenges and opportunities in the field, such as talent development and international collaborations.

International Connectivity

Partnerships Widen Reach and Knowledge

In 2022-23, HKUST established 27 fresh partnerships and renewed 33 existing ones with non-local universities and institutions. This took our global partnership count to 315, spanning academic exchanges and research collaborations in the Mainland, Asia, Europe, and the US.

Among these partnerships, we launched Hong Kong's first Dual Degree Program in Global Marine Resources Management in collaboration with the University of Southampton, offering students a unique cross-continental learning experience. Additionally, we partnered with Cornell University to initiate the HKUST-Cornell Global Hubs Partnership, crafting hands-on joint research projects with academic and societal impact.



Photo: The World Economic Forum

Hong Kong's

First Dual Degree Program in Global Marine Resources Management



In further pace-setting developments, HKUST established the Cyber-Physical Learning Alliance in collaboration with Aalto University, Zhejiang University, Tecnológico de Monterrey, and Singapore University of Technology and Design. This global alliance aims to spearhead joint projects in cyber-physical learning including mixed reality education, encourage inter-institution mobility, and explore the influence of diverse cultural contexts on cyber-physical learning.

Boosting Regional and Global Thought Leadership

Regionally, 2022-23 saw HKUST honored with the Executive Presidency of the 15-member Asian Universities Alliance (AUA) for 2023-24. Our role is to take the lead in fostering collaboration among member institutions from Asia and the Middle East in addressing regional and global development challenges in higher education, science, technology, and economics.

As a leader in global discourse, HKUST continued to shape critical agendas through platforms such as the World Economic Forum. In June 2023, five eminent faculty members took center stage at the Summer Davos in

Tianjin, addressing diverse challenges from healthcare and well-being to economic growth and innovation's role in improving people's lives. As the sole Hong Kong institution invited to speak at this event, we connected with over 1,500 top minds from more than 90 countries and regions.

Additionally, University management and faculty shared insights at a series of high-profile Times Higher Education (THE) conferences. Topics ranged from guiding research directions to fostering world-class research environments, and to exploring blockchain and metaverse impacts.

Driving Forward Internationalization Through Campus Outreach

Further fortifying our global ties, HKUST welcomed around 30 delegations from countries including Thailand, the UK, the US, and Sweden, among others, to our campus.

The University nurtured robust relationships with over 30 Consuls-General in Hong Kong through meetings, campus visits, and HKUST-led initiatives. One such initiative was the "HKUST Global Dialogue Series" offering a platform for Consuls-General to exchange ideas and perspectives on global issues.

HKUST also hosted numerous high-level exchanges with global experts. One notable occasion was the inaugural Needham Conference 2023, co-hosted with the Joseph Needham Foundation for Science & Civilisation, Needham Research Institute (Cambridge), University of Hong Kong, and University of Cambridge. Featuring 20 renowned scholars as speakers, the conference delved into how multi-civilizational exchanges have shaped modern science.

SUSTAINABLE Horizons

The University continued to lead initiatives on multiple fronts to achieve net-zero emissions, while making contributions on campus and beyond to the United Nations' Sustainable Development Goals (SDGs).

Progressing Toward Net-Zero Through Investment Strategies and Optimized Campus Operations

Striving to be a sustainability leader across the region and beyond, HKUST has taken various steps towards achieving the net-zero carbon emissions goal. In a notable effort, it became the first university in Hong Kong to pledge the elimination of investments in fossil fuels when it announced an updated environmental, social, and governance (ESG) policy in December 2022 after having practiced ESG investing since 2018. Focusing on "in-scope assets" – mainly public equities and public fixed income which make up the majority of HKUST's long-term investment portfolio – HKUST will halve greenhouse gas (GHG) emissions by 2030 from the baseline of 2021 while shifting 100% of assets to

companies who have adopted science-based targets for climate action. In addition, HKUST will allocate at least 5% of investments to companies working on climate solutions.

In the area of campus operation, the ongoing HKUST 2028 Sustainability Challenge has meaningfully reduced the University's environmental footprint over the year. The Challenge actively enhances the University's well-being and nurtures our landscape and biodiversity. Under this master plan, various measures are being implemented to align HKUST with the SDGs, reducing the environmental impact of cities and protecting life on land and underwater.

Waste

By the end of 2022-23, the University had cut waste by 45% compared with the 2014 baseline, marking solid progress toward the target of 75% by 2028. Among the new ventures, a reusable meal container lending and return scheme was launched to reduce the use of disposal containers. A Zero Plastic Takeaway Container Pilot Program was also introduced to turn disposable waste into compost and energy. These moves provided a further boost to the existing smart recycling and waste-to-compost conversion endeavors on campus.

Energy

Strategies during the year toward the goal of 15% energy reduction focused on both technical advancements and changing behavior. These included a campaign to raise awareness among laboratory users on equipment use and a student residence dashboard providing real-time energy readings and billing for the University's Global Graduate Tower residents. Smart electricity meters in nine residential halls are also now capturing energy usage data, encouraging students to save energy. Overall, power usage was reduced by 2% compared with the 2014 baseline, a saving achieved despite the addition of new buildings and a campus population increase of nearly 5,000 in the past decade.

Driving forward renewable energy generation, more photovoltaic panels were installed across campus in the second phase of the University's large-scale solar power initiative. The project aims to reduce carbon emissions by 1.5 million kilograms per annum over a 25-year period.

Water, Landscape and Biodiversity

Smart showerheads with built-in LED lights were installed in two student halls to indicate water consumption and remind students to conserve water. The goal is to save 30% on water and electricity per shower. Invigorating water conservation further, testing of a state-of-the-art “smart” drip irrigation system for the large planter areas outside the Shaw Auditorium took place.

Boosting landscape and biodiversity respect and awareness, an interactive HKUST Biodiversity Map was completed following a collective effort by our students, staff, and faculty. Featuring over 100 species, including birds, butterflies, coastal marine, and trees, the portal showcases the natural riches of the University’s seaboard campus and offers first-hand educational materials for teaching and learning about sustainability.

Community Well-Being

A new policy allowing staff to take up to four days per year as paid special leave to volunteer in the community and contribute to the improvement of Hong Kong received a warm reception, with dozens of staff

participating over the first year. Many offices also embraced this policy to develop volunteering activities as team-building exercises. In other initiatives, the University launched a Pilot Staff Mentoring Program to foster professional growth and a sense of belonging (Connecting People and Community, P.40), and developed work-from-home guidelines to ensure more work flexibility while ensuring safe and productive work spaces for staff. To support the well-being of HKUST members overall, the University engaged in a year-long “Kindness Campaign”, with events and activities promoting respect and decency as the foundation of a thriving community.

Revving Up Applicable Sustainability Innovation

The Sustainable Smart Campus as a Living Lab (SSC) serves as a cornerstone of the Sustainability Challenge. In accord with the United Nations’ SDGs, this trailblazing initiative harnesses HKUST’s top-tier research and campus facilities to promote greener lifestyle in the University community and beyond.

Backed by a HK\$50 million University grant, the internationally recognized SSC has sparked 35 projects, supported 20+ seed projects, engaged over 500 students and 200 faculty members, and attracted 400 visitors from government, industry, and academia since its launch in 2019. Greenhouse gas emissions and well-being have been key themes for funded projects, among others.

Over 2022-23, SSC launched a nap pod study to promote students’ sleep hygiene and boost good health in line with the SDGs to ensure healthy lives for all. On the environmental front, a research project was kick-started to turn construction and calcium-rich food waste into new sustainable geological materials. Other recently funded applications include the establishment of a butterfly garden to promote well-being, biodiversity, and community building, and the development of a zero-greenhouse gas-refrigerant technology that will result in low-carbon elastocaloric fridges and air conditioners for use at HKUST.

Nurturing Tomorrow’s Visionaries with Sustainable Mindsets

To drive greater awareness of sustainability thinking and activities, the year brought the launch of the dynamic Life Cycle Lab (LCL), a collaborative venture by academics and community practitioners to help build sustainable mindsets through skill-building. Life Cycle Thinking is defined as a way of analyzing complex problems to develop long-term solutions that minimize unintended consequences and avoidable mistakes. The LCL is now developing educational resources for both students and Hong Kong practitioners in the construction and manufacturing industries.

In collaboration with UGC-funded institutions and external organizations, HKUST facilitated education campaigns and sustainable infrastructure deployment across eight universities, encouraging responsible consumption and production as project manager of the Jockey Club Sustainable Campus Consumer Programme.



Leading an Eco-Friendly Lifestyle

Over 2022-23, activities under the Programme’s three key themes included:

Responsible Choices

#Eatfortheplanet Campaign

Together with Future Green (formerly Food Made Good HK), carbon emissions labeling on food and beverage menus at outlets was brought in on all eight campuses to indicate whether items have a low, medium, or high carbon footprint.

Responsible Consumption

AI-Driven Reusable Meal Container Lending System

The first system of its kind among universities in the Asia-Pacific region was initiated on the HKUST campus in mid-June. This involved the installation of a distribution machine to lend up to 120 reusable lunch boxes and a corresponding reverse vending machine, both equipped with internal cameras and AI object recognition software. The service offers users a green alternative for the disposal of takeaway containers, helping to eliminate lunch boxes dumped in landfills.

Responsible Consumer Activism

Clothing

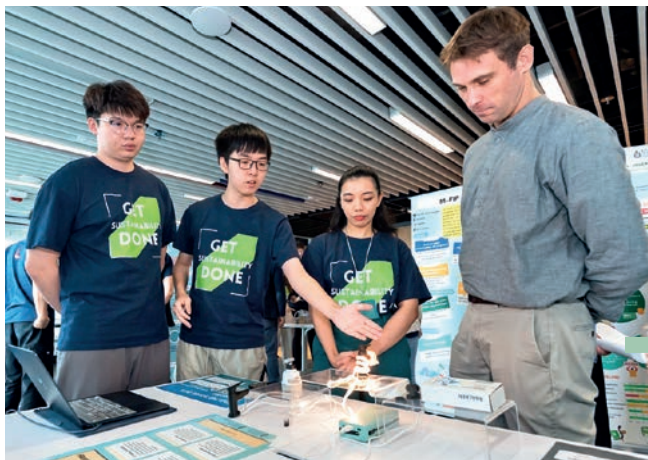
In collaboration with the Hong Kong Research Institute of Textiles and Apparel, two tours of The Mills’ garment-to-garment recycling system and Fabrica Lab took place to educate participants on upcycling and sustainable fashion. A clothing swap event was also organized with the WWF, drawing 5,400 participants to promote the circular economy.





Driving Smart Solutions Across Two Campuses

June 2023 saw over 30 students from diverse disciplines and cultures at HKUST and HKUST(GZ) converge for the Sustainable Design Thinking Certificate Program. Funded by the Tung Foundation, this initiative sought to identify creative solutions to sustainability challenges on the University's two campuses. Over nine days, students embarked on campus tours, connected with stakeholders, fostered teamwork, prototyped inventive solutions, and presented their projects. Winning ideas included a water-saving proposal by using dual mode aerators, LED light alerts and an interactive dashboard to track water consumption in student halls, and a solution to generate electricity from the use of sports equipment to encourage both fitness and the adoption of clean energy.



Campus Infrastructure Takes Home Industry Accolades for Sustainable Design

Over the past year, our commitment to eco-friendly infrastructure was recognized with prestigious industry accolades. The multi-purpose Shaw Auditorium received a merit in the Quality Building Award, regarded as an "Oscar" of the building sector in Hong Kong. The award adopted the theme of "Smart | Sustainable | Superior" in 2022. The auditorium also achieved the highest level of Hong Kong's green building certification system with a platinum rating in HK BEAM Plus.

In another recognition, the smart sustainable Jockey Club i-Village received a silver award at the 2021 HKIBIM Award presentation ceremony, held in October 2022.

Moving forward, the Martin Ka Shing Lee Innovation Building, currently under construction, will become the first university building in Hong Kong to utilize green concrete and green rebars, greatly reducing embodied carbon in its structure.

GOVERNANCE

The University was established under the HKUST Ordinance. The Court, the Council and the Senate are respectively the supreme advisory, governing, and academic bodies of the University.

The Council

2023 is an important year for the University as it welcomes Prof. Harry SHUM Heung-Yeung, a world-renowned computer scientist, in leading the Council following the stepping down of Dr. Andrew LIAO Cheung-sing, who was in stewardship as Chairman for eight important years.

The Council is also glad to see the joining of some new Members, whose experience and skill sets will contribute to the University's development and governance on various fronts. With HKUST's past three decades of successful operations, the Council will continue to be proactive in steering the strategic direction of the University and advising the Administration on its operations. Through its 11 Committees, each chaired by a Council Member, the Council exercises governance and offers advice to the University's Administration team for the purpose of moving forward the related initiatives under the University's Strategic Plan.

The Council and some of its Committees have been actively involved in the design process of the HKUST 3.0 Vision Plan, which aimed to clearly outline the landscape of the University's development, as proposed by the President shortly after her assumption of presidency. Council Members had been consulted on numerous occasions, including the University Retreat, meetings and briefing sessions, on related initiatives and the Plan was formally approved by the Council in March 2023. As usual, Working Groups were and will be formed by Council and the Administration as necessary to enable sufficient review and deliberations on the road maps, related challenges of and opportunities for respective initiatives.

Whilst the President, the Provost and the three Vice-Presidents are charged to manage the University's operations to ensure its sustained development, the Council has lent its support to the Administration's proposal to amend the University Ordinance, by



allowing the University to hire more than three Vice-Presidents as it was originally stated in the Ordinance. With the gracious support of the Legislative Council, the revised University Ordinance has been successfully promulgated since July 2023. The University is now embarking on recruiting two more Vice-Presidents, as part of the senior management team, to better drive and deliver the respective initiatives under the University's Strategic Plan.

Knowledge transfer has always been one of the key pillars of the University's mission, and the success of which will bring betterment to society in multiple fronts. Through the efforts of its Knowledge Transfer Committee, the Council is driving a robust knowledge transfer ecosystem in HKUST, so as to actualize the University's research and innovation in society. The University has for several years allocated, out of its own resources, a venture fund to support related research endeavors. For good governance, the University's Intellectual Property Policy is constantly being reviewed and refined to suit the market needs.

While the University is introducing its HKUST 3.0 endeavours, the firm foundation of HKUST formed along its 1.0 and 2.0 journey has to be mentioned. HKUST(GZ), as an important milestone of HKUST's 2.0 plan, has been considered as a timely addition to the University's Mainland platform in further developing its research and innovation in the Greater Bay Area. The Council is pleased to see the successful completion of the management infrastructure of HKUST(GZ) despite frequent interruptions and severe inhibitions during the three years of COVID times, thanks to the enormous and timely support from various parties including related authorities in Guangzhou and the HKSAR and the tireless efforts of personnel involved throughout the entire development of HKUST(GZ). On the academic front, the Council is pleased to see the first cohort of quality undergraduate students joining HKUST(GZ) in 2023, following its successful pilot postgraduate admissions. All these could not have been made possible without the substantial time and energy spent by the Council and the academic and administrative teams involved in the project. Throughout the entire process, various parties have been trying to migrate the best practices of HKUST to its Guangzhou campus where feasible. To ensure the continued success of HKUST(GZ), Council also saw the need to have close and effective coordination between the two campuses. The key principles of the "Cross-campus Coordination Framework" have been developed and elevated by Council, in addition to the "Governance



Framework of HKUST(GZ)" which was designed by Council to ensure effective governance of this new entity through proper monitoring. Moreover, following the lifting of travel restrictions, leadership of HKUST has paid multiple visits to HKUST(GZ) and related authorities on the Mainland, in order to strengthen communication and to enhance collaboration. In anticipation of HKUST(GZ)'s plan in further improving its teaching and research infrastructure, the second phase of its campus development plan would be embarked soon. Through the synergies of the two campuses, the University will, in no doubt, elevate its education, research and knowledge transfer capabilities to the next level.

Another landmark of the Council's work in the review year was the creation of the University Anthem. Led by the Council-initiated "Working Group on the University Anthem", and with the tireless efforts of Council Members, staff, students and alumni, an authentic piece of work, signifying the HKUST spirit in three languages, namely, Cantonese, English and Putonghua, has come into life in less than six months' time. The University Anthem, having received uncountable praises, is now performed in all important University occasions and ceremonies such as the University Congregation and Honorary Fellowship Ceremony.

The Court

Moving towards its 30th anniversary of establishment, the Court is glad to welcome Dr. Liao, the immediate past Chairman of the University Council, to take the helm, which was passed to him by Dr. John C. C. CHAN, who has been appointed the role of Pro-Chancellor of the University since March 2023, following his remarkable leadership of the University Court for about 15 years.

During the reporting period, the Court met twice to receive reports respectively from the Council and the President, and discussed matters relating to the University's overall direction. As for the previous years,

Members of the Court offered their insightful advice and guidance to the University's Administration in terms of overall strategic planning directions, as well as the focus and approach to be adopted in the HKUST 3.0 Vision Plan.

The Court Meeting in October 2022 was conducted in the Shaw Auditorium on the Clear Water Bay campus where Members actively exchanged their views on how initiatives under the 2021-2028 University Strategic Plan could be further refined. The discussion also touched on various governance issues including the University's collaboration with HKUST(GZ), and matters related to risk assessment and management of HKUST. The subsequent Court Meeting, held in February 2023, focused on the proposed initiatives under the HKUST 3.0 Vision Plan and its roadmap. Court Members were excited to learn from the President the list of new initiatives under the Plan and had actively shared their comments with the Administration Team on how key issues like resources planning, communication strategies, professional validation for graduates and policy support etc., should be addressed. The need to attract and retain talents in HKUST, as well as the strategies in promoting future research and innovation, were also deliberated during the Meeting.

In addition to meetings, Court Members had participated actively in major University events, including the Spring Concert, the HKUST Fun Day and the Flag-Raising Ceremonies from time to time.

On membership, six new Members, all from the University Council, were appointed to the Court in the past 12 months, while two serving Members were appointed as Honorary Members, in order that the University can continue to benefit from their wisdom and counseling.

The Senate

Being the supreme academic body of the University, the Senate reviewed and approved important academic policies and regulatory matters, as well as proposals of new and revised undergraduate and postgraduate programs, both in HKUST and HKUST(GZ).

One of the key proposals considered and approved by the Senate during the review period was the renaming of the Interdisciplinary Programs Office, which has been a major vehicle for the University's promotion of interdisciplinary undergraduate programs since 2008. The new title of Academy of Interdisciplinary Studies

(AIS) is expected to better describe the work of the unit, and thus help promote its position as a unique platform for HKUST to cooperate with prestigious international organizations and academies on a wide variety of interdisciplinary endeavors. Based on the rationale, the Senate has also approved the migration of the Division of Integrative Systems and Design from the School of Engineering to AIS to further strengthen the latter's interdisciplinary education and research prospects.

With the aim of attracting additional outstanding and accomplished researchers to the University to advance its research efforts, and in support of the University's initiatives to recruit and retain talents, the Senate has approved the establishment of a new rank of "Research Professor". This new group of Professors is expected to help elevate the University's capacity in excelling in breakthrough research, through large-scale interdisciplinary research efforts, and new strategic research initiatives.

On program development, the Senate has reviewed and approved a number of proposals including i) the Master of Science Program in Biomolecular Engineering and Health Informatics, which aims to train students how to solve bioengineering problems through integration of knowledge in biomolecular engineering and data analytical skills; as well as ii) a new Undergraduate Minor Program in Smart City which was designed to address the increasing demand of talents in the market, both locally and globally.

Under the "Unified HKUST, Complementary Campuses" framework, the Senate has been playing an important role in overseeing matters of HKUST(GZ) to ensure its standard of programs is comparable to that of HKUST. To enhance academic governance, notably the content and delivery of programs in HKUST(GZ), the Senate has approved the setting up of joint committee sessions for respective Committees of the Senate of HKUST and HKUST(GZ) to exchange their views on various program matters. In anticipation of HKUST(GZ)'s launching of the undergraduate programs from Fall 2023-24, the Senate has reviewed and approved three undergraduate program proposals of HKUST(GZ), covering the subject areas of i) Artificial Intelligence, ii) Data Science and Big Data Technology, and iii) Smart Manufacturing. As for postgraduate programs, the Master of Science Program in Technology and Policy and the Master of Public Policy Program, which are jointly offered by HKUST and HKUST(GZ), have also been reviewed and approved by the Senate.

AWARDS and Recognitions

Faculty members and students have received numerous honors and accolades over the year. The following list is not exhaustive.

Faculty

- IAS Sin Wai Kin Professor of Chinese Culture **Prof. YAN Lianke**, Chair Professor, Division of Humanities, was awarded the 6th Lee Hochul Literary Prize for Peace.
- **Prof. Berthold JÄCK**, Department of Physics, received a 2022 Croucher Tak Wah Mak Innovation Award.
- **Prof. Hugh NAKAMURA**, Department of Chemistry, was selected by the Japan Agency for Medical Research and Development and the New York Academy of Sciences to become an Interstellar Initiative Early Career Investigator.
- **Prof. BAO Zhigang**, Department of Mathematics, and **Prof. HE Ding**, Department of Ocean Science, were recognized under the 2022 Excellent Young Scientists Scheme (Hong Kong and Macao), organized by the National Natural Science Foundation of China.
- New Bright Professor of Engineering **Prof. Khaled B. LETAIEF**, Chair Professor, Department of Electronic and Computer Engineering, received an Honorary Doctorate from the University of Johannesburg, South Africa. He was also the first in Hong Kong to receive the Edwin Howard Armstrong Achievement Award from the Institute of Electrical and Electronics Engineers Communications Society.
- **Prof. Charles NG Wang-Wai**, Chair Professor, Department of Civil and Environmental Engineering, was awarded the Ho Leung Ho Lee Foundation Prize for Scientific and Technological Progress.
- **Prof. Wei SHYY**, Professor Emeritus, Department of Mechanical and Aerospace Engineering, was honored with the Satya N. Atluri Award by the International Conference on Computational & Experimental Engineering and Sciences.
- **Prof. WANG Shuai**, Department of Computer Science and Engineering, was recognized with a Google Research Scholar Award.
- **Prof. ZHANG Limin**, Chair Professor, Department of Civil and Environmental Engineering, received the Ralph B. Peck Award 2023.
- **Prof. QU Huamin**, Dean of the Academy of Interdisciplinary Studies, was named a 2023 AI 2000 Most Influential Scholar in Visualization.

Fellows and Board Memberships

- IAS Si Yuan **Prof. Gunther UHLMANN**, Chair Professor, Department of Mathematics, and IAS Senior Member **Prof. TYE Bik-Kwoon** were elected members of the US National Academy of Sciences.
- **Prof. Jensen LI Tsan-Hang**, Department of Physics, was awarded a 2022 Croucher Senior Research Fellowship.
- **Prof. LING Shiqing**, Chair Professor, Department of Mathematics, was named a Senior Research Fellow 2022/23 by the Research Grants Council.
- **Prof. FAN Zhiyong**, Departments of Electronic and Computer Engineering, and Chemical and Biological Engineering, was elected a 2023 Optica Fellow.
- **Prof. Stephane REDONNET**, Department of Mechanical and Aerospace Engineering, was elected a Fellow of the Royal Aeronautical Society.
- **Prof. SU Hui**, Department of Civil and Environmental Engineering, was named a 2023 Global Fellow of Ewha Womans University.
- **Prof. GUO Yike**, Chair Professor, Department of Computer Science and Engineering, **Prof. CHEUNG Shing-Chi**, Department of Computer Science and Engineering, and **Prof. SHI Ling**, Department of Electronic and Computer Engineering, were elected Fellows of the Institute of Electrical and Electronics Engineers.
- **Prof. Melody CHAO**, Department of Management, was named a Fellow of the Society for Personality and Social Psychology.
- **Prof. HUNG Mingyi**, Chair Professor, Department of Accounting, was appointed a Senior Fellow of the Asian Bureau of Finance and Economic Research.
- **Dr. Timothy Markham PAGE**, Division of Humanities, was awarded a 2023 Guggenheim Fellowship.

Students and Researchers

- In underwater robotics, the **HKUST Remotely Operated Vehicle Team** won the Champion title in the Explorer Class of the Hong Kong Regional Contest of the MATE International ROV Competition 2023.
- Mechanical and Aerospace Engineering students **KWOK Kin-Nam**, **Minji SEO**, **CHAN Kwun-Chung**, and **LEUNG Yuen-Yin** received the Hong Kong James Dyson Award 2022.
- Civil Engineering undergraduates **SO Wing-Han**, **CHAN Ka-Yi**, **POON Chun-Ho**, **SHEK Pui-Yuk** and **Carol WONG Kin-Ning** won the silver award at the Hong Kong Engineers Week 2023 Innovation Competition.
- Electronic and Computer Engineering PhD students **SONG Jianxin**, **LIAO Zebing**, and **KANG Chengbin** won the Championship at the TCL Scientific Research Vlog Competition 2022.
- MBA students **Calvin CHAN**, **CHEN Wensi**, **Mariya KANEDA**, and **Abhijeet PAUL** took first place at the USC Marshall's "Everyone's Business Global Case Competition", held in Los Angeles.
- Individualized Interdisciplinary Program PhD student **Gabby FUNG** won the Golden Award at the 2022 Qianhai-Guangdong-Hong Kong-Macao-Taiwan Youth Innovation and Entrepreneurship Competition (Hong Kong Division).
- Dual Degree Program in Technology & Management undergraduate **Wesley LEUNG** received the Institution of Engineering and Technology (IET) Prize 2022.

HKUST Medals

- **Prof. Desmond TSOI Yau-Chat**, Department of Computer Science and Engineering, was awarded the Michael G. Gale Medal for Distinguished Teaching.
- **Prof. James WONG**, Division of Social Science, received the HKUST Common Core Teaching Excellence Award 2022 for the course SOSC3520 Understanding Comparative Politics.

Honorary Doctorates and Honorary Fellows

Honorary Doctorates

- **Prof. KAN Yuet-Wai**, Louis K. Diamond Chair in Hematology and Professor Emeritus at the University of California, San Francisco
- **Prof. Sir Jim MCDONALD**, Principal and Vice-Chancellor of the University of Strathclyde
- **Dr. WANG Xiaodong**, Director and Investigator of the National Institute of Biological Sciences, Beijing
- **Dr. YIP Wing-Sie**, BBS, JP, Music Director Emeritus of Hong Kong Sinfonietta

Honorary Fellows

- **Mr. David FONG Man-Hung**, BBS, JP, Managing Director of Hip Shing Hong (Holdings) Company Limited
- **Mr. LEE Shing-Put**, BBS, Chairman of Xinyi Energy
- **Mr. David LEE Wai-Hung**, Director of Lee Kum Kee
- **The Hon. Starry LEE Wai-King**, GBS, JP, Chairwoman of the Democratic Alliance for the Betterment and Progress of Hong Kong (DAB)
- **Mr. Daniel YU Chung-Kwong**, Founder of Maxwell Electronics Limited

FACTS and Figures

Students

Student Enrolment (2022-23)

School / Area	Undergraduate	Postgraduate			Total
		MPhil	PhD	Taught	
Science	2,201	151	630	565	3,547
Engineering	3,522	244	1,163	1,057	5,986
Business and Management	3,523	44	78	1,543	5,188
Humanities and Social Science	348	40	26	491	905
Interdisciplinary Programs	318	43	97	355	813
Joint School	543	0	0	283	826
Total	10,455	522	1,994	4,294	17,265

* as of Oct 2022

Non-Local Student Enrolment (2022-23)

Home Country	Undergraduate	Postgraduate		Total
		Research	Taught	
Mainland China	966	1,760	2,983	5,709
Other Places in Asia	883	235	135	1,253
Rest of the World	207	78	58	343
Total	2,056	2,073	3,176	7,305

* as of Oct 2022

Undergraduate Exchanges (2022-23)

Host / Destination Region	Exchange-in	%	Exchange-out	%
Mainland China	18	3.4%	17	2.4%
Asia (Excluding Mainland China)	81	15.1%	90	12.9%
North America	66	12.3%	196	28.1%
Central and South America	3	0.6%	0	0.0%
Europe	359	67.1%	377	54.0%
Australia and New Zealand	8	1.5%	18	2.6%
Africa	0	0.0%	0	0.0%
Total	535	100.0%	698	100.0%

* as of Aug 2023

Graduate Numbers (2023)

School / Area	Undergraduate	Postgraduate		Total
		Research	Taught	
Science	464	178	444	1,086
Engineering	832	309	817	1,958
Business and Management	832	34	1,062	1,928
Humanities and Social Science	85	25	455	565
Interdisciplinary Programs	78	25	203	306
Joint School	141	0	175	316
Total	2,432	571	3,156	6,159

* as of Aug 2023

Employment (2022)

Employment Situation	Undergraduates	Postgraduates			
		PhD	MPhil	Taught Master (Except MBA)	MBA
	%	%	%	%	%
Employed	73.4	62.3	34.1	25.8	83.4
Further Studies	19.7	1.1	46.9	5.2	4.2
Returned to Home Country or Emigrated	4.5	36.1	17.9	67.2	0.0
Others	2.3	0.6	1.0	1.6	12.5
Employment Situation by Industry	%	%	%	%	%
Commerce and Business	61.0	8.0	30.6	64.2	68.4
Engineering and Industry	25.9	16.0	42.9	18.2	26.3
Education	8.3	74.9	22.4	14.1	2.6
Community and Social Services	2.5	1.1	2.0	0.9	2.6
Government and Related Organizations	2.2	0.0	2.0	2.6	0.0
Others	0.0	0.0	0.0	0.0	0.0

Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.

Faculty

Faculty Members (As of 30 Jun 2023)

School / Area	Regular	Visiting	Total
Science	197	6	203
Engineering	259	19	278
Business and Management	155	33	188
Humanities and Social Science	152	6	158
Interdisciplinary *	51	6	57
Total ^	767	68	835

* This refers to faculty members under the Academy of Interdisciplinary Studies (formerly known as the Interdisciplinary Programs Office), HKUST Jockey Club Institute for Advanced Study and HKUST Institute for Public Policy.

^ A faculty member may be affiliated with multiple schools/areas, so the total may be different from the sum of faculty members of all schools/areas.

Research

No. of New Research Projects and Funding (2022-2023)

	Number	Funding (in HK\$M)
UGC	513	178.7
RGC	245	276.0
Others	814	501.4
Total	1,572	956.1**

** Includes R&D projects administrated by R and D Corporation and Mainland platforms.

No. of Patents (2022-23)

Filed	372
Granted	296

International Rankings

HKUST	No. 2 in the World World's Top 600+ Young Universities, Times Higher Education Young University Rankings 2023
	No. 7 in Asia Asia's Top 600+ Universities, Times Higher Education Asia University Rankings 2023
	No. 15 in Asia Asia's Top 800+ Universities, QS Asia University Rankings 2024
	No. 29 in the World, No. 1 in Hong Kong, No. 3 in Greater China World's Top 250 Universities, Global University Employability Ranking and Survey 2024 (Emerging, published by Times Higher Education)
	No. 60 in the World World's Top 1400+ Universities, QS World University Rankings 2024
	No. 64 in the World World's Top 1900+ Universities, Times Higher Education World University Rankings 2024
School of Science	No. 45 in the World, No. 1 in Hong Kong World's Top 400+ Universities in Materials Sciences, QS World University Rankings by Subject 2023
	No. 50 in the World, No. 2 in Hong Kong World's Top 400+ Universities in Environmental Sciences, QS World University Rankings by Subject 2023
	No. 55 in the World, No. 1 in Hong Kong World's Top 600+ Universities in Chemistry, QS World University Rankings by Subject 2023
	No. 59 in the World, No. 1 in Hong Kong World's Top 500+ Universities in Mathematics, QS World University Rankings by Subject 2023
School of Engineering	No. 21 in the World World's Top 200 Universities in Transportation Science & Technology, Global Ranking of Academic Subjects, Academic Ranking of World Universities 2023
	No. 25 in the World World's Top 400 Universities in Energy Science & Engineering, Global Ranking of Academic Subjects, Academic Ranking of World Universities 2023
	No. 28 in the World, No. 3 in Hong Kong World's Top 200+ Universities in Civil and Structural Engineering, QS World University Rankings by Subject 2023
	No. 31 in the World, No. 1 in Hong Kong World's Top 1000+ Universities in Computer Science, Times Higher Education World University Rankings by Subject 2024
	No. 33 in the World, No. 1 in Hong Kong World's Top 1300+ Universities in Engineering, Times Higher Education World University Rankings by Subject 2024
	No. 36 in the World, No. 1 in Hong Kong, No. 3 in Greater China World's Top 500+ Universities in Electrical and Electronic Engineering, QS World University Rankings by Subject 2023
	No. 40 in the World, No. 1 in Hong Kong World's Top 600+ Universities in Computer Science and Information System, QS World University Rankings by Subject 2023
School of Business and Management	No. 47 in the World, No. 1 in Hong Kong World's Top 500+ Universities in Mechanical Engineering, QS World University Rankings by Subject 2023
	No. 1 in the World Global EMBA Ranking – Kellogg-HKUST Executive MBA Program, Financial Times Global EMBA Ranking, 12th time World No. 1 in 2007, 2009-2013, 2016-2018, 2020, 2022-2023
	No. 12 in the World, No. 2 in Asia Business Master's Rankings – MSc in Global Operations Program, QS Business Master's Rankings: Supply Chain Management 2024
	No. 18 in the World QS International Trade Rankings 2023 – HKUST EMBA Program
	No. 28 in the World, No. 1 in Asia Top 100 Business School Research Rankings, University of Texas at Dallas (UTD) Top Business School Research Rankings: Worldwide Rankings (Year Range: 2018-2022)
	No. 30 in the World, No. 1 in Hong Kong World's Top 900+ Universities in Business and Economics, Times Higher Education World University Rankings by Subject 2024
	No. 31 in the World, No. 1 in Hong Kong, No. 1 in Greater China World's Top 500+ Universities in Business and Management Studies, QS World University Rankings by Subject 2023
	No. 31 in the World, No. 1 in Hong Kong, No. 3 in Greater China World's Top 500+ Universities in Economics and Econometrics, QS World University Rankings by Subject 2023
	No. 32 in the World, No. 2 in Asia Business Master's Rankings – MSc in Finance Program, QS Business Master's Rankings: Finance 2024
	No. 34 in the World, No. 2 in Hong Kong World's Top 300+ Universities in Accounting and Finance, QS World University Rankings by Subject 2023
School of Humanities and Social Science	No. 55 in the World, No. 3 in Hong Kong World's Top 500+ Universities in Social Sciences and Management, QS World University Rankings by Subject 2023

APPENDICES

Appendix I Court, Council and Senate As of 30 June 2023

Court Membership		
Chairman & Honorary Chairman	Dr. the Honourable Andrew LIAO Cheung-sing, GBM, GBS, SC, JP	
Honorary Chairmen	Dr. John C C CHAN, GBS, JP	Dr. the Hon Vincent H S LO, GBM, GBS, JP
Honorary Members	Dr. Anissa CHAN, SBS, MH, JP The Hon Ronnie C CHAN, GBM Dr. Thomas T T CHEN Dr. CHENG Hon-Kwan, GBS, OBE, JP Dr. Christopher CHENG, GBS, OBE, JP Dr. the Hon Henry CHENG, GBM, GBS Mr. Paul M F CHENG, JP Mr. Linus W L CHEUNG, JP Dr. Raymond K F CH'IEN, GBS, JP Prof. Alice CHIU, BBS, JP Prof. Stephen CHOW, GBS, JP Mr. Ian C W FOK, SBS, JP Mr. Tim FRESHWATER Dr. William K FUNG, SBS, JP Mrs. Yvette FUNG YEH Yi-Hao Dr. Aron H HARILELA, BBS, JP Mr. John B HARRISON Dr. Herman S M HU, SBS, JP Mr. Lester G HUANG, SBS, JP Dr. Simon S O IP, GBS, JP Dr. Hans Michael JEBSEN, BBS Prof. Roger KING Dr. LAU Wah-Sum, GBS, JP	Dr. the Hon LEE Shau-Kee, GBM Dr. the Hon Charles Y K LEE, GBM, GBS, JP Mr. Marcus C W LEE Ms. Margaret LEE Pui-Man Dr. the Hon Andrew K N LI, GBM Mr. LIU Sing-Cheong, JP Ms. LO Kai-Yin, SBS Mr. Raymond C LO Mr. Winston LO Yau-Lai, SBS Dr. the Hon LUI Che-Woo, GBM, GBS, MBE, JP Mr. Francis LUI Yiu-Tung Mr. Maximilian MA Yung-Kit Dr. Michael H H MAK, SBS, JP Dr. Anthony NEOH, SC, JP Mr. David PONG Teng The Hon Abraham SHEK Lai-Him, GBS, JP Mr. SIN Chung-Kai, SBS, JP Mr. Kenneth TING Woo-Shou, SBS, JP Mrs. Christine WONG, SBS Dr. Lawrence T WONG Dr. the Hon Wilfred Y W WONG, GBM, GBS, JP Ms. Marjorie YANG, GBS, JP Dr. Larry C K YUNG
Ex-Officio Members	Prof. Harry SHUM Heung-Yeung (Chairman of the Council) Prof. Patrick YEUNG Kai-Cheung (Vice-Chairman of the Council) Mr. Stephen YIU Kin-Wah, JP (Treasurer of the University) Prof. Nancy IP Yuk-Yu, SBS, MH, JP (President)	Prof. GUO Yike (Provost) Mr. CHEUNG Tsz-Kan (President of the HKUST Students' Union) Mr. Bennet TSUI Chun Yin (President of the HKUST Alumni Association) Mr. Doug WONG (Chairman of the HKUST Staff Association)
Appointed Members	Mr. Bernard AU YANG Mr. Johnson CHA Mou-Daid Ms. Dee Dee CHAN The Hon Ben CHAN Han-Pan, BBS, JP Mr. Nicholas CHAN Hiu-Fung, MH, JP Mr. Andy FEI Chi-En Mr. David FONG Man-Hung, BBS, JP Ms. Anita FUNG Yuen-Mei, BBS, JP Mr. Eugene Michael FUNG Yue-Ming Mr. Wilson FUNG Ying-Wai, MH Prof. Albert IP Yuk-Keung Ms. Catherine KWAI Yuk-Nin Dr. Colin LAM Ko-Yin, SBS Prof. Jack LAU Mr. Quinn Y K LAW, SBS, JP Mr. LEE Shing-Put, BBS Mr. David W H LEE	Mr. Michael LEE Tze-Hau, JP The Hon Starry LEE Wai-King, GBS, JP Ms. Catherine K C LEUNG Mr. Kenneth Benjamin LI Mr. Paul MAK Tak-Chuen Mr. Sebastian S W MAN Dr. Daryl NG Win-Kong, SBS, JP Mr. Neil SHEN Mr. Benedict SIN Nga-Yan Mr. Kyran SZE, MH Dr. James E THOMPSON, GBS Dr. Alex WONG Siu-Wah Mr. Samuel WONG Tat-Sum Ms. Jennifer WOO Chun-En Mr. Michael WU Wei-Kuo Mr. Michael YONG-HARON
Appointed Senate Representatives	Prof. Khaled BEN LETAIEF Prof. HUANG Yong	Prof. HUI Kai-Lung Prof. Andrew POON Wing-On

Council Membership

Chairman	Prof. Harry SHUM Heung-Yeung	
Vice-Chairman	Prof. Patrick YEUNG Kai-Cheung	
Treasurer of the University	Mr. Stephen YIU Kin-Wah, JP	
President of the University	Prof. Nancy IP Yuk-Yu, SBS, MH, JP	
Provost	Prof. GUO Yike	
Vice-President	Prof. Tim CHENG Vice-President for Research and Development	
Deans	Prof. CHOW King-Lau Acting Dean of Students	Prof. Kellee TSAI Dean of Humanities and Social Science
Academic Members of the Senate	Prof. HUI Kai-Lung	Prof. Steven B Miles
Chairman of Convocation	Mr. Terry TSANG Kin-Chung	
Elected Staff Member	Ms. Christine HO	
Elected Student Member	Mr. Henry TSUI Hang-Shing	
Other Members Not Being Employees or Students of the University	Ms. Cally CHAN Shan-Shan, MH The Hon Rock CHEN Chung-Nin, SBS, JP Mrs. Jennifer CHENG Mr. Peter CHEUNG Kam-Fai, SBS Ms. Kitty CHOI Kit-Yu, SBS Mrs. Helen KAN Mr. Rembert LAI Siu-Kin	Ms. Tennessy HUI Mei-Sheung, MH, JP Ir. Dr. Humphrey LEUNG Kwong-Wai, JP Mr. Michael NGAI Ming-Tak Ms. Edith SHIH Mr. Billy WONG Wing-Hoo, BBS, JP Mr. Patrick YEUNG Wai-Tim Dr. Samuel W K YUNG, SBS, MH, JP

Membership of Standing Committee

Chairman	Prof. Harry SHUM Heung-Yeung	
Vice-Chairman	Prof. Patrick YEUNG Kai-Cheung	
Members	Ms. Cally CHAN Shan-Shan, MH Mrs. Jennifer CHENG Prof. Tim CHENG Mr. Peter CHEUNG Kam-Fai, SBS Prof. GUO Yike Prof. Nancy IP Yuk-Yu, SBS, MH, JP Mrs. Helen KAN Mr. Rembert LAI Siu-Kin	Ms. Tennessy HUI Mei-Sheung, MH, JP Prof. PONG Ting-Chuen Ms. Edith SHIH Prof. WANG Yang Mr. Billy WONG Wing-Hoo, BBS, JP Mr. Patrick YEUNG Wai-Tim Mr. Stephen YIU Kin-Wah, JP Dr. Samuel W K YUNG, SBS, MH, JP

Membership of Audit Committee

Chairman	Mrs. Helen KAN	
Vice-Chairman	Mr. Patrick YEUNG Wai-Tim	
Members	Mr. Colin CHAU Yu-Nien Ms. Tennessy HUI Mei-Sheung, MH, JP Ir. Dr. Humphrey LEUNG Kwong-Wai, JP	Mrs. Agnes K NARDI Mr. Martin SIU Man-Tat, SBS

Membership of Campus Development Committee

Chairman	Mr. Rembert LAI Siu-Kin	
Vice-Chairman	Mr. Billy WONG Wing-Hoo, BBS, JP	
Members	Sr. AU Choi-Kai, SBS Mr. Peter CHEUNG Kam-Fai, SBS Ir Dr. Humphrey LEUNG Kwong-Wai, JP	Mr. Jimmy LEUNG Cheuk-Fai, SBS Mr. Patrick SIU
Ex-officio	Prof. PONG Ting-Chuen Vice-President for Administration and Business	

Membership of Committee on HKUST(GZ)

Chairman	Prof. Harry SHUM Heung-Yeung	
Vice-Chairman	Prof. Patrick YEUNG Kai-Cheung	
Members	Ms. Cally CHAN Shan-Shan, MH Prof. GUO Yike Prof. Nancy IP Yuk-Yu, SBS, MH, JP Mr. Rembert LAI Siu-Kin	Mrs. Helen KAN Ms. Edith SHIH Mr. Stephen YIU Kin-Wah, JP Dr. Samuel W K YUNG, SBS, MH, JP

Membership of Finance Committee

Chairman	Mr. Stephen YIU Kin-Wah, JP	
Vice-Chairman	Ms. Edith SHIH	
Members	Mr. Johnson CHA Mou-Daid Mrs. Jennifer CHENG Mr. Jackson CHEUNG Wing-Kwong	Mr. Michael NGAI Ming-Tak Mr. Ronald THAM Seng-Yum
Ex-officio	Prof. GUO Yike Provost	Prof. PONG Ting-Chuen Vice-President for Administration and Business

Membership of Honorary Awards Committee

Chairman	Prof. Harry SHUM Heung-Yeung	
Vice-Chairman	Prof. Nancy IP Yuk-Yu, SBS, MH, JP	
Members	Mr. Bernard AU YANG Prof. Stuart GIETEL-BASTEN Dr. Daryl NG Win-Kong, SBS, JP Ms. Edith SHIH	Prof. XIE Ting Prof. XU Yan Prof. YEUNG Dit-Yan Dr. Samuel W K YUNG, SBS, MH, JP

Membership of Human Resources Committee

Chairman	Prof. Patrick YEUNG Kai-Cheung	
Vice-Chairman	Mr. Patrick YEUNG Wai-Tim	
Members	Ms. Cally CHAN Shan-Shan, MH	
Ex-officio	Prof. Nancy IP Yuk-Yu, SBS, MH, JP President Prof. GUO Yike Provost	Prof. PONG Ting-Chuen Vice-President for Administration and Business

Membership of Institutional Advancement and Outreach Committee

Chairman	Dr. Samuel W K YUNG, SBS, MH, JP	
Vice-Chairman	Mrs. Jennifer CHENG	
Members	Ms. Dee Dee CHAN Mr. Peter CHEUNG Kam-Fai, SBS Mrs. Helen KAN Ms. Margaret LEE Pui-Man	Ms. Tennessy HUI Mei-Sheung, MH, JP Mr. Philip TSAI, BBS, JP Mr. Ryan WONG Man-Yeung Mr. Michael YONG-HARON
Ex-officio	Prof. WANG Yang Vice-President for Institutional Advancement Prof. TAM Kar-Yan, MH, JP Dean of Business and Management	Prof. Kellee TSAI Dean of Humanities and Social Science

Membership of Knowledge Transfer Committee

Chairman	Ms. Cally CHAN Shan-Shan, MH	
Vice-Chairman	Mr. Peter CHEUNG Kam-Fai, SBS	
Members	Prof. Witman HUNG, JP Ir. Dr. Humphrey LEUNG Kwong-Wai, JP Mr. Brandon LIN Ho-Ping Mr. Michael NGAI Ming-Tak	Ms. Edith SHIH Prof. Richard SO Hau-Yue Prof. Henry YAN He
Ex-officio	Prof. Tim CHENG Vice-President for Research and Development Dr. Shin Cheul KIM Associate Vice-President for Research and Development (Knowledge Transfer)	Prof. Ricky LEE Executive Director of Shenzhen Platform Development Office

Membership of Legal Affairs Committee

Chairman	Ms. Edith SHIH	
Vice-Chairman	Ms. Tennessy HUI Mei-Sheung, MH, JP	
Members	The Hon Rock CHEN Chung-Nin, SBS, JP	Mr. Peter CHEUNG Kam-Fai, SBS

Membership of Senior Executives Affairs Committee

Chairman	Prof. Harry SHUM Heung-Yeung	
Members	Prof. Patrick YEUNG Kai-Cheung	Mr. Stephen YIU Kin-Wah, JP

Senate Membership

Chairman	Prof. Nancy IP Yuk-Yu, SBS, MH, JP, President	
Provost	Prof. GUO Yike	
Vice-Presidents	Prof. Tim CHENG, Research and Development Prof. PONG Ting-Chuen, Administration and Business	Prof. WANG Yang, Institutional Advancement
School of Science	Prof. WONG Yung-Hou, Dean Prof. HUANG Yong Prof. JIN Tianling Prof. Stanley LAU Prof. LEUNG Wa-Hung	Prof. LI Jiyiing Prof. WANG Jiannong Prof. XIE Ting Prof. XU Kun Prof. YANG Sen
School of Engineering	Prof. LO Hong-Kam, JP, Dean Prof. I-Ming HSING Prof. Irene LO Prof. Howard LUONG Prof. Andrew POON Wing-On Prof. SHAO Minhua	Prof. SUN Qingping Prof. ZHANG Jiheng Prof. ZHANG Limin Prof. ZHOU Xiaofang Prof. TSUI Chi-Ying Prof. YU Hongyu
School of Business and Management	Prof. TAM Kar-Yan, MH, JP, Dean Prof. CHEN Tai-Yuan Prof. David COOK Prof. GONG Yaping Prof. HONG Jiewen Prof. Allen HUANG	Prof. HUI Kai-Lung Prof. HUNG Mingyi Prof. LI Jiatao Prof. ZHANG Chu Prof. ZHENG Shaohui
School of Humanities and Social Science	Prof. Kellee TSAI, Dean Prof. CAI Yongshun	Prof. HE Wenkai Prof. Steven B MILES
HKUST Fok Ying Tung Graduate School	Prof. Charles NG Wang-Wai, Dean	
The Dean of Students	Prof. CHOW King-Lau, Acting	
Interdisciplinary Programs Office	Prof. QU Huamin, Director Prof. Alexis LAU	Prof. Naubahar SHARIF
Elected Members of the Academic Staff	Prof. Zachary BROWN Prof. LU Mengqian	Prof. WANG Yi
Co-opted Members of the Academic Staff	Prof. Khaled BEN LETAIEF Prof. CHAN Che-Ting Prof. Andrew COHEN Prof. Bradley A. FOREMAN Prof. Jimmy FUNG Chi-Hung Prof. Andrew HORNER	Prof. Henry LAM Hei-Ning Prof. Arthur LAU Prof. Ross MURCH Prof. Emily NASON Prof. Penger TONG Prof. George YUAN Jie
Other Administrators	Mr. James A. PRINCE, Academic Registrar	Dr. Gabrielle WONG, Director of Library Services
Student Representatives	Mr. CHEUNG Tsz-Kan, President of the HKUST Students' Union	Mr. CHAO Pok-Yin, Undergraduate Representative Mr. WANG Yu, Postgraduate Representative

Appendix II
Advisory Committees

School of Science Advisory Committee

Prof. Marvin COHEN Professor of the Graduate School, Department of Physics, University of California, Berkeley, USA	Prof. Jean-Marie LEHN Director of Laboratory of Supramolecular Chemistry, Institut de Science et d'Ingénierie Supramoléculaires (ISIS), Universite de Strasbourg, France	Prof. WANG Xiaodong Director and Investigator, National Institute of Biological Sciences, Beijing, China
Prof. Roger E. HOWE William R. Kenan, Jr. Professor Emeritus of Mathematics, Department of Mathematics, Yale University, USA	Prof. George PAPANICOLAOU Robert Grimmitt Professor of Mathematics, Department of Mathematics, Stanford University, USA	Prof. YANG Weitao Philip Handler Distinguished Professor of Chemistry, Department of Chemistry, Duke University, USA
Prof. Roberto KOLTER Professor Emeritus of Microbiology, Department of Microbiology, Harvard Medical School, USA	Prof. Randy SCHEKMAN Howard Hughes Medical Institute Investigator and Professor of Cell and Developmental Biology, Department of Molecular and Cell Biology, University of California, Berkeley, USA	Prof. YAU King-Wai Professor of Neuroscience, The Solomon H. Snyder Department of Neuroscience, Johns Hopkins University, USA
Prof. Patrick LEE William & Emma Rogers Professor of Physics, Department of Physics, Massachusetts Institute of Technology, USA		

School of Engineering Advisory Committee

Industrial Advisors		
Mr. Oscar CHOW Non-Executive Director Chevalier Group	Mr. Simon NGO Siu-Hing Head of Engineering Hong Kong & Gas Co. Ltd.	Mr. James TONG Director of Public Affairs John Swires & Sons (HK) Ltd.
Mr. Alfred CHUANG General Partner, Race Capital Founder and Chairman, Magnet Systems	Ir. Dr. Derrick PANG Yat-Bond CEO Asia Allied Infrastructure Holdings Ltd.	Dr. TONG Wen CTO, Wireless Network Huawei Technologies Co. Ltd.
Mr. Albert IP Yuk-Keung Independent Non-Executive Director New World Development	Mr. Fred SHEU National Technology Officer Microsoft Hong Kong	Mr. Frank WONG Managing Director Rohde & Schwarz Taiwan & Hong Kong Ltd.
Ir. Dr. LO Wai-Kwok Member of Legislative Council Engineering Functional Constituency HKSAR	Dr. Edward G. TIEDEMANN, Jr. Qualcomm Fellow Senior Vice President of Engineering of Qualcomm	Dr. ZHOU Jingren Head of Data Analytics and Intelligence Lab Alibaba DAMO Academy

School of Business and Management Advisory Council

Chairman	Dr. Hans Michael JEBSEN, BBS, Chairman, Jebsen Group	
Members		
Mr. Louis McDaniel BOWEN Chairman and Chief Executive Officer Asia Capital Management Limited and China Advisors Limited	Prof. Albert IP Yuk-Keung Senior Advisor to the President The Hong Kong University of Science and Technology	Mr. SECK Wai-Kwong Former Chief Executive Officer Eastspring Investments Group
Mr. Adriel CHAN Vice Chair Hang Lung Properties Limited	Mr. Keith KERR, SBS, JP Chairman The Development Studio Ltd.	Mrs. Kathryn SHIH Board Member of Julius Baer, and Former President Asia Pacific and Member of Group Executive Board of UBS AG
Ms. Ronna CHAO Chief Executive Officer Novel Investment Partners Limited	Ms. Teresa KO Yuk-Yin, BBS, JP China Chairman Freshfields Bruckhaus Deringer	Mr. Sukanto TANOTO Chairman RGE Pte Ltd.
Dato' Seri CHEAH Cheng Hye Co-Chairman and Co-Chief Investment Officer Value Partners Group Ltd.	Mr. Anish LALVANI Chairman Euro Suisse International Ltd.	Dr. James E. THOMPSON, GBS Chairman Crown Worldwide Holdings Ltd.
Mrs. Jennifer YU CHENG Group President and Deputy Vice Chairwoman CTF Education Group	Mr. David LEE Director Lee Kum Kee Company Limited	Mr. Andy TUNG Managing Partner of QBN Capital, and Non-Executive Director of Orient Overseas (International) Limited
Mr. Eric FOK Kai-Shan, JP Vice Chairman Fok Ying Tung Group	The Honourable Mrs. Margaret LEUNG, SBS, JP Non-official Member Executive Council of Hong Kong	Mr. John Raymond WITT Group Managing Director Jardine Matheson Limited
Dr. William FUNG Kwok-Lun, SBS, OBE, JP Group Deputy Chairman Fung Group	Ms. Nisa LEUNG, MH, JP Managing Partner Qiming Venture Partners	Mr. Douglas WOO Chun-Kuen, BBS, JP Chairman and Managing Director Wheelock and Company Ltd.
Ms. Wendy GAN Deputy Chief Executive Officer (District Development) West Kowloon Cultural District Authority	Dr. Vincent H. S. LO, GBM, GBS, JP Chairman Shui On Holdings Ltd.	Mr. Thomas Jefferson WU, JP Independent Non-executive Director of Melco Resorts & Entertainment Limited, and Founder & Chairman of Hong Kong Academy of Ice Hockey, Hong Kong Amateur Hockey Club Limited and LOHAS Rink Limited
Mr. Benjamin HUNG Pi-Cheng, BBS, JP Chief Executive Officer, Asia Standard Chartered Bank	Mr. Maximilian Y. K. MA Chairman Lee Heng Diamond Group	Mr. Arthur YUEN Kwok-Hang, JP Deputy Chief Executive Hong Kong Monetary Authority

School of Business and Management Career Development Advisory Council

Convenor	Prof. TAM Kar-Yan, Dean of Business and Management	
Chairman	Prof. Albert IP, Senior Advisor to the President and Special Advisor to the Dean of Business and Management	
Ex-Officio Member	Prof. Allen HUANG, Associate Dean of Business and Management	
Members		
Ms. Amy CHO Former CEO, Hong Kong & Deputy Head, Asia Pacific, Schroder Investment Management Limited	Ms. Stephanie LO Executive Director of Shui On Land, Executive Director and Managing Director of Shui On Management Limited	Mr. Paul YEUNG Managing Director and Head of Sales and Client Coverage, Business Banking, Commercial Banking, The Hongkong and Shanghai Banking Corporation Limited
Mr. Wallace LAM Managing Director and Head of Institutional Banking Group, DBS Bank (Hong Kong) Limited	Prof. Eric MA, GBS, JP Executive Director and CEO of NWS Holdings Limited, and Executive Director of New World Development Company Limited	Dr. Samuel YUNG, SBS, MH, JP Executive Director and Honorary Advisor, AIA International Limited
Mr. John LEE Vice Chairman and Head of Greater China, Global Banking, UBS AG	Mr. Charles TSAI CEO and Executive Director, Power Assets Holdings Limited	Mr. ZHANG Liping Senior Managing Director and Chairman of Greater China, Blackstone Group (HK) Limited

School of Humanities and Social Science Advisory Committee

Prof. Timothy BROOK Emeritus Professor, The University of British Columbia	Prof. Helen SIU Honorary Professor, Hong Kong Institute for the Humanities and Social Sciences, The University of Hong Kong Professor of Anthropology, Yale University	Prof. ZHOU Xueguang Kwoh Ting Li Professor in Economic Development, Professor of Sociology Senior Fellow, Freeman Spogli Institute for International Studies, Stanford University
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Academy of Interdisciplinary Studies (Formerly the Interdisciplinary Programs Office) Advisory Board

Prof. Jay TURNER Head of the Division of Engineering Education, Vice Dean for Education James McKelvey Professor of Engineering Education Professor of Energy, Environmental and Chemical Engineering, Washington University in St Louis, USA	Prof. Michael HOWLETT Burnaby Mountain Professor and Canada Research Chair (Tier 1), Department of Political Science, Simon Fraser University, Canada	Prof. ZHANG Xiaodong Robert M. Critchfield Professor in Engineering, Department of Computer Science and Engineering, Ohio State University, USA
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Appendix III

Senior Management, Faculty/Staff Appointments & Professor Emeritus

Senior Management Appointments

Prof. GUO Yike Provost	Prof. Penger TONG Associate Provost (Mainland Affairs)	Prof. WONG Yung-Hou Dean of Science
Dr. Alison Elizabeth LLOYD Associate Provost (Institutional Data and Research)	Prof. LO Hong-Kam Dean of Engineering	

Senior Faculty/Staff Appointments

Ms. Daisy CHAN Pui-Chu Director of Public Affairs	Mr. LEUNG Ying-Kit Director of Campus Development	Dr. SZE Tin-Ngai Director of Mainland Affairs and Special Assistant to the President
Mrs. Kim-Hong Thi CHENG Director of Internal Audit	Dr. LING Hang-Yin Director of Entrepreneurship Center	Dr. Gabrielle WONG Ka-Wai Director of Library Services
Dr. Stanley LAU Chun-Kwan Director of Ocean Research Facility (Ocean Science, Environment & Sustainability and Life Science)	Dr. Sean William John MCMINN Director of Center for Education Innovation	Prof. YE Wenjing Director of Materials, Design and Manufacturing Facility (CWB)
Ms. Jennifer LEUNG Chun-Yee Director of Human Resources	Prof. SUN Qingping Head of the Department of Mechanical and Aerospace Engineering	

Professor Emeritus

Prof. Harry SHUM Heung-Yeung HKUST Jockey Club Institute for Advanced Study	Prof. Edwin LAI Lun-Cheung Department of Economics and Division of Public Policy	Prof. George Fitzgerald SMOOT Department of Physics and HKUST Jockey Club Institute for Advanced Study
Prof. DAI Weimin Department of Chemistry	Prof. Andrew Leitch MILLER Division of Life Science	Prof. TSANG Hin-Kwok Department of Electronic and Computer Engineering
Prof. Guillermo GALLEGO Department of Industrial Engineering and Decision Analytics and Department of Information Systems, Business Statistics & Operations Management	Prof. Anaimalai V. MUTHUKRISHNAN Department of Marketing	Prof. WANG Susheng Department of Economics
Prof. HUI Chi-Wai Department of Chemical and Biological Engineering	Prof. Wei SHYY Department of Mechanical and Aerospace Engineering	Dr. Gerald Roe PATCHELL Division of Social Science
Prof. KWOK Yue-Kuen Department of Mathematics	Prof. Johnny SIN Kin-On Department of Electronic and Computer Engineering	

Appendix IV

Finance

Overview

The financial year 2022-23 recorded a surplus of \$1,159 million (deficit of \$230 million for 2021-22). The surplus in 2022-23 was mainly due to a significant investment gain resulted from investment markets rebound when global economies re-opened after cancellation of COVID-19 pandemic control measures. By excluding the impact of investment return, the University recorded a surplus of \$352 million in 2022-23 compared to \$439 million in 2021-22.

The University has practiced Environmental, Social and Governance (“ESG”) investing since 2018. In October 2022, Council approved an ESG Investment Policy (“ESG Policy”), the first among local universities. The ESG Policy calls for recognizing ESG factors as material determinants for the investments held. Through working with fund managers for whom ESG considerations are integral to their investment philosophy and manifested throughout their investment process, the University seeks alignment with its value as an educational institution and the goal to be a sustainability leader across the region and beyond.

Consolidated Income and Expenditure

Consolidated income increased by \$1,727 million to \$6,715 million in 2022-23 (\$4,988 million for 2021-22). The increase was mainly contributed by the increase in interest and net investment income of \$1,476 million and government subventions and grants of \$229 million. Higher government subventions and grants was due to additional University Grants Committee (“UGC”) supplementary grants for General Pay Adjustment (“GPA”) and the increase in research and other earmarked grant income.

Consolidated expenditure increased by \$337 million to \$5,560 million (\$5,223 million for 2021-2022), which was mainly attributable to higher salary costs arising from GPA, increase in premises maintenance and related costs, and growth in teaching and research expenses as the University bounced back to its normal operations and activities for the year after COVID-19 pandemic.

Segment Results

Commentaries on operating segments, analyzed by UGC-Funded Activities and non-UGC Funded Activities, are as follows:

UGC-Funded Activities

UGC-Funded Activities showed a surplus of \$436 million for the year (deficit of \$154 million for 2021-22). After excluding the interest and net investment income of \$335 million (loss of \$276 million for 2021-22), the underlying result was a surplus of \$101 million (\$122 million for 2021-22).

Due to the favorable investment return recorded in 2022-23, the University’s UGC reserves increased to \$4,285 million (\$3,849 million for 2021-22).

Non-UGC Funded Activities

Self-Financing Continuing Professional Education Programs, Research and Other Activities

Self-financing CPEP activities contributed a surplus of \$375 million (\$365 million for 2021-22), remained at the similar level as compared to last year. Non-UGC funded research activities contributed a surplus of \$17 million (\$23 million for 2021-22), mainly arising from completed commercial research projects and government subsidies. Other activities contributed a surplus of \$210 million (deficit of \$225 million for 2021-22) which was mainly due to the increase in allocation of net investment income. In aggregate, the overall surplus of these operating segments amounted to \$602 million (\$163 million for 2021-22).

Donations Activities

Donations totaling \$126 million were recognized as income for 2022-23 (\$234 million for 2021-22). Overall, this segment showed a surplus of \$121 million (deficit of \$239 million for 2021-22) as contributed by the increase in investment return. The University has successfully secured \$417 million new pledges in 2022-23 (\$230 million in 2021-22).

For research related donations received in 2022-23, the University has applied matching under the Research Matching Grant Scheme and \$111 million matching grants were awarded in 2022-23.

Another \$55 million research related donations were received after the year end, enable the University to reach the ceiling of Research Matching Grant.

Non-UGC Reserves

Non-UGC reserve balances reached \$8,896 million at the end of 2022-23 (\$8,119 million for 2021-22). The increase in the reserve balance was mainly contributed by the afore-stated investment return, self-financing CPEP and other activities.

Capital Expenditure

Several construction projects are underway to enhance the University’s facilities and infrastructure to cater for accommodation and amenity needs of students as well as for academic and research activities. Apart from the soon to be completed new 1551-bed Student Hostel, other major capital works include one innovation building and one research building, which are targeted to be completed in 2025 and 2026 respectively.

In addition, to cope with the increasing demand of high-performance computing (HPC) facilities from HKUST researchers, two new HPC facilities are going to be built on campus. They are expected to be completed in 2024 and 2026 respectively.

The University is also exploring to build an HKUST InnoTech Park near Clear Water Bay campus, which will provide a platform for collaboration between academia and industry. The University will continue to upgrade its research and knowledge transfer infrastructure and activities in its next stage of development.

Outlook

After the three years long historic disruption of COVID-19 pandemic, the University bounced back to its normal operations and activities in 2022-23.

The opening of Hong Kong University of Science and Technology (Guangzhou) in September 2022 embarked on our transformative HKUST 2.0 journey, which provided abundant opportunities to foster collaboration among faculties and students from both campuses and deepened our collaborations in the Guangdong-Hong Kong-Macao Greater Bay Area and other provinces and cities across the nation.

Following the passage of HKUST (Amendment Bill) by the Legislative Council in July 2023 on removing the restriction on the maximum number of Vice-Presidents at HKUST, the University will have greater flexibility in its strategic manpower planning to better position itself to support Hong Kong’s development into a global innovation and technology (I&T) hub and maximize opportunities arising from relevant I&T policies.

Riding on the success and remarkable achievement in 30 years history, the management team is ready to take on new opportunities and challenges to begin our HKUST 3.0 journey. The entire HKUST community will also work closely together to elevate the University to the next level of excellence.

Significant financial resources will be required to support and sustain various initiatives and projects. As of June 30, 2023, the University maintained a healthy reserve of over \$13 billion. The University will remain prudent and cautious in financial planning to ensure there is adequate resources available for the future development.

Stephen YIU Kin-Wah
Treasurer of the University
October 26, 2023

Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 30 JUNE 2023

	2023 \$million	2022 \$million
Income		
Government Subventions and Grants	3,262	3,033
Tuition, Programs and Other Fees	1,594	1,519
Interest and Net Investment Income / (Loss)	807	(669)
Donations and Benefactions	126	234
Auxiliary Services and Other Income	563	537
Transfers from Deferred Capital Funds	363	334
	6,715	4,988
Expenditure		
<i>Teaching, Learning and Research</i>		
Teaching and Research	3,487	3,285
Library	120	117
Central Computing Facilities	133	129
Other Academic Services	123	115
	3,863	3,646
Institutional Support		
Management and General	473	466
Premises and Related Expenses	878	792
Student and General Education Services	323	298
Other Activities	23	21
	1,697	1,577
	5,560	5,223
Surplus / (Deficit) from operation for the year	1,155	(235)
Share of Result of an Associate	5	6
Surplus / (Deficit) for the year before tax	1,160	(229)
Tax	(1)	(1)
Surplus / (Deficit) for the year after tax	1,159	(230)
Other comprehensive income for the year		
Item that may be reclassified subsequently to income and expenditure:		
Exchange differences arising from translation	(24)	(7)
	(24)	(7)
Item that will not be reclassified to income and expenditure:		
Unrealised gain on equity securities at fair value through other comprehensive income	78	25
	54	18
Total comprehensive income / (loss) for the year	1,213	(212)
Transfers to / (from):		
UGC Funds	436	(154)
Restricted Funds	54	(169)
Other Funds	723	111
	1,213	(212)

Consolidated Balance Sheet

AS AT 30 JUNE 2023

	2023 \$million	2022 \$million
Non-Current Assets		
Property, Plant and Equipment	7,350	6,938
Intangible Assets	16	16
Right-of-use Assets	16	31
Financial Assets at Fair Value through Other Comprehensive Income	605	518
Financial Assets at Fair Value through Income and Expenditure	10,122	8,424
Interest in an Associate	95	100
Bank Deposits with Original Maturity over Three Months	41	0
	18,245	16,027
Current Assets		
Financial Assets at Amortised Cost	0	39
Inventories	1	1
Accounts Receivable and Prepayments	656	399
Bank Deposits with Original Maturity over Three Months	2,339	3,318
Cash and Cash Equivalents	1,444	1,351
	4,440	5,108
Current Liabilities		
Accounts Payable and Accruals	1,052	1,053
Lease Liabilities	11	14
Provision for Staff Benefits	169	193
Deferred Income	2,349	1,871
Tax Payable	1	1
	3,582	3,132
Net Current Assets	858	1,976
Total Assets Less Current Liabilities	19,103	18,003
Non-Current Liabilities		
Accounts Payable and Accruals	47	48
Lease Liabilities	6	18
Provision for Staff Benefits	38	39
Deferred Income	611	1,078
Deferred Capital Funds	5,220	4,852
	5,922	6,035
NET ASSETS	13,181	11,968
UGC Funds	4,285	3,849
Restricted Funds	1,963	1,852
Other Funds	6,933	6,267
TOTAL FUNDS	13,181	11,968

Approved by the Council on 26 October 2023

Appendix V

Summary of Internal Control and Measures

HKUST continues to adopt a system of internal control that is based on a 5-component framework issued by the Committee of Sponsoring Organizations of Treadway Commission to ensure the effectiveness of its governance. This 5-component framework consists of Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring.

The following measures are in place to provide assurance about the effectiveness of internal controls to HKUST's Council and Senior Management:

- a. **Whistleblowing Policy** is in place and operating to provide a safe and protective means by which staff, students, and other stakeholders of the University are able to raise concerns with the appropriate University authorities against any malpractice in the University.
- b. **Internal Audit Office** is responsible to prepare annual risk-based audit plans and perform independent reviews to assess adequacy of the design and operating effectiveness of internal controls as well as to provide recommendations to streamline processes and procedures for efficiency enhancement. Co-sourced external service providers are engaged whenever necessary to supplement in areas that require deep industry expert knowledge such as cybersecurity, campus development, etc.
- c. **External Auditors** are engaged to carry out statutory annual audit of HKUST's financial statements and provide an independent assurance on the University's compliance with guidelines, terms and conditions imposed by the Government's University Grants Committee. External Auditors also perform review of HKUST's tax exemption status under the Hong Kong Inland Revenue Ordinance's section 88.

Audit Committee of the University Council approves the annual audit plan, supervises the scope of work performed by Internal Audit Office, and reviews internal audit reports and concerns on internal controls raised by the internal and/or external auditors. Furthermore, the Audit Committee has an oversight role on the appointment and performance of both internal and external auditors to ensure the independence and objectivity of their work.

HKUST Strategic Risk Management

Strategic Risk Management policy and process play an important role in the University's governance. HKUST's Council and its Audit Committee are responsible for the oversight of risk management and the University's management carries out an annual risk assessment exercise to ensure that the University's strategic risks are identified, monitored, and well managed.

HKUST continues to uphold its core values as well as formulate and optimize relevant policies and guidelines to lead its community forward. In view of the fast-changing environment, demographic changes, and a return to normalcy from COVID-19 pandemic around the world in FY2023-24, the University paid extra efforts in handling issues arising from the lack of resources, talent recruitment and retention, efficiency of administrative processes, and search for additional land to facilitate the University's strategic development.

The University's Senior Management engaged external consultant to (a) facilitate the 2023-24 Annual Risk Assessment Exercise and (b) assess HKUST's existing Risk Management governance and framework. The 2023-24 Annual Risk Assessment's process was enhanced to include (i) Risk Questionnaire to all heads of academic and non-academic departments/units, and (ii) workshops for key stakeholders to enable a more robust assessment from a high number of participants.

Considering opportunities and challenges of the operating environment, HKUST's overall risk profile and 2023-24 Strategic Risk Register shall be reviewed from time to time to ensure appropriate risk mitigation measures according to the latest development directions and strategic objectives of the University. The following summary highlights key aspects of 2023-24 annual risk assessment results:

Reputational Risks

The University's Senior Management actively monitored how the external environment and internal activities might pose risks to its reputation and took reference of comments and observations from various stakeholders. Apart from focusing on strategic recruitment for faculty, non-academic staff, and students, the University identified ways to promote international collaborations to showcase its research impacts and developed new and innovative program disciplines such as those on Environment, Social and Governance to address major global challenges and future demand of society.

HKUST spent much effort in enhancing and further developing cross-campus coordination framework on applicable activities and collaboration with HKUST (Guangzhou) (GZ). In carrying out its mission and overall competitiveness in academic excellence, research and innovation, the University under its "Unified HKUST, Complementary Campuses" principle for both Clear Water Bay and Guangzhou campuses continues to strive cohesively in assisting the economic, social, and cultural development of Hong Kong as well as the Greater Bay Area and the Mainland.

Financial Risks

HKUST, being a public-funded university, continues to ensure accountability and value for money by optimizing its resources while achieving its key strategic goals as well as maintaining financial sustainability to support its future operations.

The University seeks to deploy a prudent approach in financial planning and budgetary controls to maintain a sound and healthy financial status while staying bold in supporting key strategic initiatives, covering faculty recruitment and retention, capital projects, and research infrastructure. Although HKUST and HKUST(GZ) are two separate legal entities and operate independently in terms of financial management, the synergy arising from this partnership, with proper oversight, creates much more significant research impact while maximizing the operational resources of HKUST.

Risks arising from investment activities in the volatile financial markets are also monitored and reviewed by the Council's Finance and Audit Committees through the formulation of investment strategies with acceptable risk profile and return objectives, to be adjusted with evolving situations. The University seeks advice from external professional consultants from time to time in modifying its investment strategies to foster the University's financial strength.

Operational Risks

Operating processes and procedures are enhanced on a continuous basis with assessment of risks from various angles. The University places great importance on developing talent and efforts were made by various Schools and Offices in recruiting and nurturing talent with more diverse areas of strength. The University also paid extra attention to create a well-protected environment to ensure the health and safety of its members. Issues on cybersecurity were widely exchanged within the University community and awareness on personal data protection was also enhanced in FY2023-24.



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