

UNIVERSITY ACCOUNTABILITY AGREEMENT 2019/20 – 2021/22 TRIENNIUM

1. BACKGROUND, CONTEXT AND PURPOSE

2. HONG KONG FUNDING FRAMEWORK: KEY PRINCIPLES

3. INSTITUTIONAL MISSION AND VISION

- Institutional mission
- Institutional vision
- Strategic priorities and actions

4. ACTIVITY DOMAINS AND PERFORMANCE MEASURES

- Quality of the student experience of teaching and learning
- Quality of research performance and of research postgraduate experience
- Knowledge transfer and wider engagement
- Enhanced internationalisation
- Financial health and institutional sustainability

5. GOVERNANCE AND INSTITUTIONAL MANAGEMENT

- Recruitment, induction and continuing professional development of university council members
- Institutional strategy
- Management of risk
- Delegation of authority
- Periodic review of governance arrangements

6. UGC FUNDING ALLOCATION TO THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

- UGC funding methodology
- Approved student numbers for the 2019-22 triennium
- Other UGC funding

7. FORMAL AGREEMENT

1. BACKGROUND, CONTEXT AND PURPOSE

1. The University Accountability Agreement (Agreement) is a formal agreement between The Hong Kong University of Science and Technology (HKUST) and the University Grants Committee (UGC) of Hong Kong. It serves to articulate the nature and substance of the relationship between HKUST and the UGC. Along with the dialogue, the Agreement forms a key element of the strategic framework underpinning this relationship.

2. This strategic dialogue is an important element in the action being taken by universities and by the UGC to strengthen the governance of publicly-funded higher education universities in Hong Kong and by such action to enhance their accountability. The Agreement reinforces the autonomous status of the universities by allowing them to articulate their individual missions, visions and strategic goals. The Agreement allows the UGC to be satisfied that the wider public interest is both recognised and met by HKUST, as well as providing assurance through high-level performance measures of a commitment to continuous quality improvement. For HKUST, the Agreement assures members of its governing body as well as its staff and students that the key elements are in place of the robust institutional governance which helps to guarantee HKUST's autonomy.

3. The Agreement reaffirms the funding to be provided to a university by the UGC, setting out those elements which collectively represent the single-line block grant from the UGC over the triennial funding period for the 2019/20 to 2021/22 triennium. It also sets out any conditions attached to such funding, as well as being a reminder that all universities are required to follow the UGC Notes on Procedures (NoP) and other guidelines as promulgated and updated by the UGC from time to time.

4. HKUST is also required to submit its teaching, learning and related processes to regular quality audit through the aegis of the Quality Assurance Council (QAC) and to submit to its research activity being assessed on a regular basis by the UGC. Specific outcomes and outputs from such periodic audit and assessment exercises are reflected as appropriate in the Agreement. The Agreement is not intended to replicate or replace such exercises.

5. By signing this Agreement, HKUST affirms that all funds received from the UGC will be used solely for the purposes for which they are intended. Such funds are provided in the expectation that HKUST will seek to achieve value for money and be economical, efficient and effective in its use of public funds.

6. The Agreement will be reviewed on an annual basis as part of the strategic dialogue between HKUST and the UGC. This annual review will consist of a check on progress towards targets and outcomes agreed over the timeframe of HKUST's strategic plan, which is aligned with the three-year span of the funding settlement from the UGC.

7. It is expected that the process of dialogue leading to the joint acceptance of the Agreement will mean that universities and the UGC will keep to its terms, both in spirit and in the letter. Where a university fails to do so without the prior agreement of the UGC, the UGC may decide on appropriate action having regard to the merits of individual cases to ensure that HKUST is made aware of the potential consequences of it continuing to act in such a way.

8. The Agreement is signed by both HKUST and the UGC as a public affirmation of the commitment of both parties to confirming and enhancing the global reputation of Hong Kong's higher education sector as a provider and enabler of teaching, research and related activity of the highest quality and of the greatest benefit to the people of Hong Kong.

2. HONG KONG FUNDING FRAMEWORK: KEY PRINCIPLES

9. For the funding triennium of 2019/20 to 2021/22, the Government has agreed to provide a total sum of recurrent grants of HK\$60,467.1 million¹ to the UGC based on a submission drawing on plans submitted by each university. Each plan has been subject to scrutiny and challenge by the UGC through a process of strategic dialogue with individual universities. This process respects the autonomy of a university and its unique nature, being based on an examination and discussion of the effectiveness of a university's strategy (as articulated in its strategic plan) in enabling it to advance its mission, vision and role, with reference to:

- i. The university's competitiveness in Hong Kong and internationally;
- ii. Collaboration within and outside the UGC sector;
- iii. Capacity-building in key areas such as internationalisation and knowledge transfer;
- iv. The development of the self-financing sector; and
- v. Its use of the outcomes of key exercises such as QAC audits and the Research Assessment Exercise (RAE) 2014 to influence its longer-term strategy.

10. The UGC and the Government are committed to the principle of funding being allocated to the eight publicly-funded universities on a three-year basis, with that funding consisting of a single-line block grant to each university. This approach is an explicit recognition of their autonomous status. On their part, universities accept that they have a duty to be openly accountable for their proper stewardship of funds, irrespective of their source, and of other resources at their disposal.

11. The UGC considers that competition drives excellence. Competition among universities for a proportion of funded places is therefore embedded in the UGC's overall approach as the process of competing for places requires a university to take a critical look at its activities and its contributions, particularly in relation to its role within the higher education sector in Hong Kong, regionally and internationally, as well as in addressing community needs.

12. While the principle of the single-line budgetary allocation is, as stated above, fundamental to the UGC's approach, the use of its funding is subject to certain conditions. For its part, HKUST accepts that:

- i. Co-teaching of UGC-funded and self-funded programmes is permitted, subject to there being in place a transparent and fair system for costing and for the subsequent

¹ This figure includes a sum of HK\$1,323.6 million of recurrent grants to be allocated in the form of earmarked grants and funding. These include funding to be allocated for Areas of Excellence Scheme, Earmarked Research Grants, knowledge transfer and other centrally held provisions.

transfer of funds and subject to adherence to the requirements for such a system being as set out in the “Cost Allocation Guidelines for UGC-funded and non-UGC funded Activities”;

- ii. There must be no cross-subsidy of UGC resources into supporting non-UGC funded activities;
- iii. “Mixed-mode” funding is not allowed where UGC-funded students might be charged a higher fee in order to subsidise lower fees for self-funded students;
- iv. Additional years for the second degree within dual/double undergraduate degree programmes must be self-financed, subject to certain exceptions for particular teacher education programmes;
- v. Sub-degree and taught postgraduate degree programmes should in general be self-financed;
- vi. Part-time undergraduate and part-time research postgraduate programmes are not eligible for public funding;
- vii. Admission of non-local students by over-enrolment is permitted, subject to conditions set out in the UGC NoP;
- viii. The consequences as prescribed in the NoP of under-enrolment of UGC-funded students;
- ix. Any proposed moves of programmes to a higher-weighting academic programme category require the agreement of the UGC, based on a strong case for the justification of such a move; and
- x. It should adhere to the 20% rule on the balance of the General and Development Reserve Fund for a funding period.

13. Specific details of the funding being provided by the UGC to HKUST are set out in Section Six of this Agreement.

3. INSTITUTIONAL MISSION AND VISION

14. For the UGC, it is important that the strategies adopted by universities are effective in enabling an institution to advance its mission through enhancing its competitiveness, strengthening its ability to build its capacity, enabling collaboration and using the outcomes of exercises such as the 2014 RAE as a key element in its future development.

Institutional Mission

15. HKUST’s mission as agreed with its Council is to advance learning and knowledge through teaching and research, particularly in science, technology, engineering, management and business studies; and at the postgraduate level; and to assist in the economic and social development of Hong Kong.

Institutional Vision

16. HKUST’s vision as agreed with its Council is to be a leading University with significant international impact and strong local commitment, with more specific aspirations as follows:

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

Strategic Priorities and Actions

17. As an overarching planning framework, the University Management has taken a long term perspective by attempting to rise above the cyclical considerations and arriving at a more holistic model in which:

- The recruitment, development and support of **Talent** as well as the creation and application of **Knowledge** form the *Twin Pillars* that support key actions to continue achieving HKUST's five strategic objectives. The core competency of universities is all about people. By virtue of attracting and bringing together the best and brightest minds, HKUST will be best placed to strive for academic excellence; and
- A *three-pronged approach* composed of the key elements of **Education, Research (Basic and Applied) and Translational Activities (Knowledge Transfer / Societal Contribution)** is adopted to integrate our priorities and actions across disciplines and domains as a matter of our academic ideals. In addition to education and research endeavours, the *three-pronged approach* applies to our academic personnel management, research organisations and policies (e.g. the School Budget Model), and to curricular and pedagogical developments.

When compiling HKUST's Strategic Plan, the Administration has involved the Council fully in the development process given their vital role to play in the institution-level strategy setting mechanism. Further details are reported under Section 5.1 on the actions taken in this regard. High-level strategic priorities by HKUST over the timeframe of the Strategic Plan from 2016 to 2020 and more specific actions for the three-year triennial funding period from 2019/20 to 2021/22 are set out in the ensuing paragraphs.

18. In the Strategic Plan (SP) 2016-2020, five objectives have been identified as priorities for HKUST's development. In summary, HKUST wants to be recognised as:

- i. **A University of choice for talents, attractive to the best global minds** – with the recruitment of high quality talents as the top priority HKUST, by default, will stand a much higher chance of success in driving various initiatives for education and research, and realising all other strategic objectives.

Strategies

Students

- Increase selectivity and improve quality of student intake.
- Attract diverse student talents of varied excellence.
- Deliver comprehensive branding and outreach campaign on a global scale.

Faculty

- Undertake proactive faculty recruitment across all disciplines from around the world.

- Strengthen faculty remuneration package and support for their families.
- Strengthen systems to develop and retain talent.

Staff

- Build HKUST's reputation as an "employer of choice" to attract and retain the best talents.
- Create an environment to encourage staff creativity and innovation.

- ii. **A leader in education and research, *setting the trends for future*** – In education, HKUST strives to be the driver of frontier knowledge, and deliver a transformative educational experience for our students. In research, HKUST strives to be the originator of breakthrough research in selected areas that set the path globally for new and impactful research directions and thinking. HKUST has identified five targeted cluster areas cutting across different disciplines, i.e. Data Science; Sustainability; Public Policy; Autonomous Systems and Robotics; Design Thinking and Entrepreneurship.

Strategies

Transformative Education

- Champion a distinctive and flexible curriculum.
- Emphasise the engagement and motivation of students.
- Provide a vibrant and internationalised student experience.
- Nurture highly competent and desirable graduates with outstanding attributes.
- Strengthen the support for postgraduate education.

Pioneer Research Directions

- Pursue five targeted areas.
- Focus on frontier research and explore new but promising research domains.
- Actively seek out external/competitive research funding.
- Extend our research strengths and presence in Mainland and internationally through strategic partnerships.
- Undertake a definitive plan for renewal of research facilities.
- Support the strategic development of research institutes & centers.

- iii. **A powerhouse for innovation and entrepreneurship, *evidenced by the successes of our faculty, students, and alumni*** – Knowledge transfer has been a core part of HKUST's mission since its foundation. Innovation and entrepreneurship are important means to achieving its mission and objective in this area. In recent years, governments in Hong Kong and China have placed emphasis on, and invested in technology and innovation. HKUST will actively leverage and look into available opportunities and resources in science and technology to strengthen and extend its knowledge transfer efforts in Hong Kong and beyond. Given appropriate support and encouragement, HKUST's entrepreneurial faculty and enthusiastic students can achieve much more in this area.

Strategies

Leveraging Opportunities

- Fully leverage opportunities in Hong Kong, Mainland China, and the world.
- Develop HKUST's Mainland platform headquartered in Nansha to accelerate innovation & knowledge transfer.

Nurturing entrepreneurship

- Develop an innovation and entrepreneurial ecosystem.
- Provide distinctive entrepreneurship education offerings and activities across disciplines.
- Recognise entrepreneurship and knowledge transfer achievements.
- Mobilise alumni in supporting innovation and entrepreneurship.

Advance social responsibility

- Support social enterprises start-ups and promote community service.

- iv. **An exemplar of best-in-class standards, practices, and operations, as an agile and effective organisation** – World-class talents and global intellectual leadership call for best-in-class administrative support systems. Many of HKUST's administrative processes originate from decades ago and seem “over-done” creating bureaucracy under the present circumstances. These structural issues will be addressed on a university-wide scale via continuous improvement and gradual restructuring to deliver efficient business processes and strike an optimum staffing balance. Building upon its high-performance “can-do” culture, HKUST aims to achieve best in class standards, adopt exemplary practices in our day-to-day operations, and create an inspirational and sustainable campus environment.

Strategies

High performance culture

- Review and enhance administrative systems, structure and processes.
- Nurture a high-performance culture.

Develop and retain administrators and non-academic staff

- Strengthen staff training and leadership development programs.
- Ensure that our compensation structure is competitive.

Inspirational and sustainable campus to work, study and live

- Support campus planning to advance our academic mission.
- Develop more community, showcase, interaction spaces on campus.
- Implement quality assurance mechanism for campus facilities.
- Develop a smart and sustainable campus.

Optimise financial resources of HKUST

- Optimise use of surpluses and reserves.
- Improve budget processes and management information.

- v. **A champion of diversity, to build an inclusive and collaborative community** – HKUST was originally built with a diverse ecosystem of faculty, staff and students by design. Genuine diversity of demographic, cultural and academic profiles will generate diversity of ideas, eventually leading to cross-fertilisation of creativity and innovativeness under an inclusive and collaborative spirit. HKUST’s diverse mix of students and faculty with different social and economic backgrounds in the true sense will bring with them wide ranging perspectives and ideas. It is therefore HKUST’s determination to reach out globally by recruiting diverse talents as well as to further promote the integration of its university community by nurturing a truly diverse, tolerant, and welcoming community, and to develop an open and collaborative culture.

Strategies

Truly diverse, tolerant and welcoming university

- Widen global faculty recruitment pool for balanced representation.
- Review and enhance policies and operations to support diversity.
- Explore diverse, international opportunities.
- Develop an open, cohesive and collaborative culture across all levels.

19. When implementing the university’s SP, HKUST have put in place an annual planning and budgeting cycle which provides a structured process for communicating directional priorities / focus deliberated by senior administration, resource allocation, and development of action and budget plans in line with the SP objectives, Planning Exercise Proposal (PEP), and university priorities. Overall, HKUST is making good progress in achieving the five SP objectives. Yet, there still remain different challenges to be overcome. For continuity, HKUST will continue focusing on making progress and achievements in its five SP objectives beyond the current 5-year timeframe until 2022, in line with HKUST’s PEP. More detailed background and highlights of actions planned for the extended three-year triennial funding period from 2019/20 to 2021/22 are set out as follows:

- i. **A University of choice for talents, attractive to the best global minds** – A robust and performance-based faculty compensation system with merit raise (which overhauled the 100% across-the-board General Pay Adjustment (GPA) raise), together with a full-fledged review in alignment with market salaries, was introduced in 2012. The pertinent policies and processes of faculty merit review have been continually enhanced to promote excellence, taking into account one’s career stage, talents and varied areas of contributions. A main motivation is to appreciate impact on and contributions to education, research and knowledge transfer as well as other service and leadership roles. Against this backdrop, we will continue to attract top faculty and expand and diversify the profile, aimed at advancing HKUST’s academic strengths in selected cross-disciplinary areas as highlighted in the PEP. HKUST has increased its regular faculty size by more than 5% since 2015/16, and HKUST is committed to increasing it by another 10% in the next five years.

- ii. **A leader in education and research, *setting the trends for future*** – Anchored by the tri-modal education system, HKUST's pedagogical innovation will continue through extended and blended courses in integrating course work, team projects and overseas experiences to provide learning experiences across disciplines, geography and culture. A salient example is the launching of a full-fledged practicum-led BSc in Integrative Systems and Design which is student centric, project driven and encourages talent diversity. A suite of new programs has been introduced / approved to help meet the future needs of society by producing graduates with the required skills, and an innovative and technological mind set. Three Divisions/Department (namely, Division of Public Policy, Division of Integrative Systems and Design, Department of Ocean Science) were newly formed; and three (namely, Division of Environment and Sustainability, Department of Chemical and Biological Engineering, Department of Industrial Engineering and Decision Analytics) were renamed / restructured to champion the newly established and existing programs. With the goal of driving academic and research excellence, and supporting/accelerating program innovation, new endeavours and faculty hiring, a new school-based resources allocation model has been implemented in 2017/18 to link resources (i.e. salary, funding, space) to performance & accountability. To offer a self-critical opportunity to take stock, reflect and address all issues, a cycle of Internal Review of individual Schools is underway.

On the research front, HKUST has been providing strong infrastructural support to foster frontier research and innovation, particularly via our Central Research Facilities (CRFs), and research institutes (RIs) and centers (RCs). To ensure the infrastructure and equipment continue to be top-notch and relevant at supporting world-class research at HKUST, HKUST has implemented plans and measures for recapitalisation, renewal and upgrade of its CRFs. Also, HKUST has recently introduced a policy governing the establishment, monitoring and reporting of RIs/RCs for better evaluation, *inter alia*, of its effectiveness including its effectiveness, resource use, and governance. In particular, in line with the *three-pronged approach*, RIs have been revamped to encompass education programs, research and translational activities. In addition, the HKUST Jockey Club Institute for Advanced Study (IAS) will continue to provide a platform for catalytic interaction among the world's foremost scientists and scholars to pursue enduring knowledge. New targeted areas of research with strong relevance to societal needs are also being assessed and developed, namely ocean science, smart city, transformative aging, fintech, volatile organic compounds (VOC) for air quality, etc.

- iii. **A powerhouse for innovation and entrepreneurship, *evidenced by the successes of our faculty, students, and alumni*** – HKUST has been making efforts in promoting its entrepreneurial culture within campus and externally. In particular, the HK\$1M Entrepreneurship Competition, held since 2011, has been expanded to six other cities in the Mainland by now (namely Beijing, Guangzhou, Foshan, Zhongshan, Macau and Shenzhen). In building an innovation and entrepreneurial ecosystem, HKUST has integrated entrepreneurship education with co/extra-curricular activities including seminars, hackathon, and mentor programs. In line with the Chief Executive's Policy Address 2017 having regard to innovation and technology, HKUST is actively exploring the feasibility of establishing a campus in Guangzhou with a view to expanding HKUST's ambition in education, innovation and knowledge transfer in the Greater Bay Area and beyond. To extend its global impact, HKUST has been actively seeking collaborative opportunities to encompass new and emerging markets. For

example, the Business School has reached a three-year cooperation agreement with the Moscow School of Management SKOLKOVO. An Innovation Building will also be built on campus to form a catalyst to spark off new opportunities for innovative ideas and collaborative ventures for industries, research faculty and students; serve as a platform for engaging collaborative efforts in the hope of creating research results potentially capable of commercialisation; and become a one-stop shop for entrepreneurial and other knowledge transfer support to students and faculty.

- iv. **An exemplar of best-in-class standards, practices, and operations, as an agile and effective organisation.** Best-in-class standards, practices and operations are strategic commitments as part of HKUST becoming a University of Choice for Talents. New facilities have been / are being built to support achievement of HKUST’s strategic priorities. The following items represent HKUST’s recent and coming “new build” capital projects which amount to a total financial commitment of approximately HK\$4.1 billion:

Type	Name	Funding (HK\$ Million)	Completion Date
Teaching & Learning Facilities	Upgrade of Lecture Theatres	30	2020
	Data Center	49	2019
	New Teaching Classrooms	26	2018
Research Facilities	Animal Care Facilities	142	2019
	Wind Tunnel Facility	60	2019
	Cryo Electron Microscopy Lab	88	2019
Multi-Purpose Facilities (e.g. Art, Culture & Sports)	Multi-Purpose Auditorium	551	2021
	New Indoor Sports Hall	89	2019
	Water Sports Center	64	2019
	New / refurbished catering facilities and courtyard	49	2019
Entrepreneurship & Innovation	Innovation Building	535	2021
	The Incubator	11	2019
Student Hostel	Global Graduate Tower	465	2020
	1415 bed student residence	1,586	2023
Staff Quarters	Refurbish/Upgrade Staff Quarters	355	2022
TOTAL		4,100	

In addition HKUST has a substantial and on-going refurbishment programme to ensure that all university facilities continue to be of a standard befitting a University of Choice for talents.

As shown in the table above, a new Multi-Purpose Auditorium (MPA) will be developed to enhance campus-wide cultural and artistic endeavours by offering a wide range of music, dancing, exhibition and cultural/scholarly programs at professional and experiential learning levels. Such developments have received generous private donations, complemented by university resources to anchor these initiatives. HKUST’s priority in internationalisation will also be supported by the opening, expected in 2020, of a self-financed Global Graduate Tower with 500+ bed spaces, and with the goal of providing a facility with common space for actively promoting the multi-cultural integration of our postgraduate community.

On the people side, HKUST has embarked on a comprehensive review and overhaul of its non-academic staff performance and reward management policies. While it is a challenging task to enhance annual performance and development review and align the practices of reward management with those of faculty, HKUST is fully prepared and committed to refreshing, energising and supporting our hard working non-academic staff so that HKUST can indeed continue to strive to become best-in-class in all domains and a University of Choice for staff.

- v. **A champion of diversity, to build an inclusive and collaborative community** – A new DiversAbility Center was established to support students with special educational needs (SEN) and campus inclusion for the HKUST community. Modest success has been achieved in championing gender diversity, particularly senior female faculty hiring. Career development has also improved through policies that assist female faculty to manage their professional and family responsibilities. HKUST's figures indicate improved gender diversity across all Schools and ranks of tenure track faculty. While there is still a long way before we will reach a desirable level of faculty gender diversity, HKUST's priority and commitment in this critical area is yielding fruit. Going forward, it is planned that 30% of the budget will be reserved for female faculty hiring in the School Budget Allocation model in 2017/18. Diversity in faculty search/recruitment processes will continue to be monitored. In student recruitment, HKUST intends to further increase our non-local undergraduate intake to 25% to seek even greater diversity by focusing on underrepresented national regions and countries.

4. ACTIVITY DOMAINS AND PERFORMANCE MEASURES

20. A regular review of institutional performance is an important element of sound governance. It allows an institution to derive leverage from its strengths, while highlighting other areas where action on issues requiring attention might be taken to its longer-term advantage. It also allows an institution to demonstrate in its key areas of activity that it has taken note of those elements which are important in the future development of higher education in Hong Kong. For the UGC, these elements are in particular important:

- Quality of the student experience of teaching and learning
- Quality of research performance and of research postgraduate experience
- Knowledge transfer and wider engagement
- Enhanced internationalisation
- Financial health and institutional sustainability

21. The higher education sector is a major asset for Hong Kong, benefitting from a major investment of public funds each year. Measuring the overall performance of the sector provides a measure of sector-wide performance for public information, as well as strengthening both the public profile and reputation of the sector and its overall value to the community. Measurement of performance helps ensure public confidence in universities through enhancing their accountability. Measurement also allows the higher education sector to demonstrate that individual institutions are committed to continuous quality improvement in their individual circumstances, as well as high standards of governance and educational practice.

22. As far as is practicable, data for the performance measures is derived from existing institutional returns to the UGC, whether through Common Data Collection Format (CDCF) returns or other statistical returns, or from audited sources such as a university's annual financial statements. Where other sources are used, these sources are acknowledged in the introduction to each performance measure.

23. The UGC acknowledges in its NoP (Chapter 6 on Data Collection and Returns) that, "it requires information about the activities of the UGC-funded institutions for a variety of purposes, including assessment of recurrent and capital funding requirements, monitoring progress, advising on academic developments generally, monitoring progress and expenditure on RGC-funded research projects, reporting to the Government, the Legislature and the public. The data so collected also enables many ad hoc questions to be answered without further enquiry of the institutions".

4.1 The Quality of the Student Experience of Teaching and Learning

24. The core components of the performance measures in this activity domain are intended to demonstrate that an institution has effective strategies in place to deliver improvements in teaching quality, to enhance the effectiveness of the learning environment and to maximise student learning outcomes, particularly in relation to learning gain leading to appropriate employment or further study. The data for (1) and (2) under the sector-wide performance measures below are derived from a standard question in each university's student survey.

Sector-wide Performance Measures

- 1) Undergraduate satisfaction with the quality and value which they have gained from their teaching and learning experience
- 2) Undergraduate satisfaction with their overall learning environment
- 3) Undergraduate employment success rate
- 4) Employer satisfaction with graduates

Institution-specific Key Performance Indicators

- 1) Language improvement based on ELPA, an HKUST-developed English test benchmarked against IELTS
- 2) Pedagogical innovations and teaching development using active learning pedagogies
- 3) Career development measured by employability globally

4.2 The Quality of Research Performance and of Research Postgraduate Experience

25. Performance measures in this domain are intended to illustrate that an institution has strategies in place appropriate to its mission to encourage research and scholarship and which seek to improve the quality and volume of research outputs. The measures take account of factors such as research impact and measures in place to ensure positive learning outcomes for research postgraduate students, including equipping them for careers appropriate to their specialism.

Sector-wide Performance Measures

- 1) Percentage of research activities judged to be world leading or internationally excellent as assessed in the latest Research Assessment Exercise
- 2) Value of total research income
- 3) Average time-to-completion, graduation rate and employability of research postgraduates, allowing for disciplinary differences

Institution-specific Key Performance Indicators

- 1) Success rate of competitive grants
- 2) Esteem measures including number of professional society recognitions / awards, other prizes & honours
- 3) RPg student experience based on end-of-program survey results

4.3 Knowledge Transfer and Wider Engagement

26. While acknowledging that quantitative performance measures in this domain are not yet sufficiently developed to reflect the full spectrum of institutional activities aimed at wider engagement with the community, the performance measures are intended to demonstrate in part how universities engage in knowledge transfer and in wider engagement with the community, defined as, “the systems and processes by which the knowledge, expertise and intellectually linked assets of universities are constructively applied beyond higher education for the wider benefit of the economy and society, through two-way engagement with business, the public sector (including the school sector), cultural and community partners”, with innovative, profitable, economic or social improvements being part of that benefit.

27. Knowledge transfer and wider engagement includes activities such as consultancies, collaborative research (with industrial, commercial or other non-higher education partners such as NGOs), contract research (undertaken for industrial, commercial or other non-higher education partners such as NGOs and creative or cultural organisations), continuing professional development (CPD), licensing, start-ups, spin-outs and public engagement. Such activities can loosely be categorised as: (i) the provision of research and business services (consultancy; collaborative research; contract research; and CPD); (ii) innovation (licensing; start-ups; and spin-outs); and (iii) public engagement (networking and public events; projects with a social or community benefit).

Sector-wide Performance Measures

- 1) (a) Total income from knowledge transfer via the provision of research and business services (i.e. collaborative research, contract research, consultancies, CPD)
(b) Total income from knowledge transfer as innovative activity (i.e. income generating from intellectual property as defined in CDCF and from start-up companies)
- 2) Expenditure on public engagement activities (e.g. public lectures, performance arts, exhibitions and others as defined in CDCF)

Institution-specific Key Performance Indicators

- 1) Technology transfer and commercialisation by number of patents filed, granted and used
- 2) Entrepreneurship - number of start-up and spin-off companies funded, incubated or coached by HKUST including Technology Start-up Support Scheme for Universities (TSSSU) and number of entries in HKUST-supported competitions
- 3) Other societal contribution: number, participant size and diversity of community engagement projects, social service events, art related functions

4.4 Enhanced Internationalisation

28. System-wide performance measures in this domain are designed to illustrate the impact of an institution's development of a holistic approach to the growing importance of internationalisation to the higher education sector in Hong Kong. Such an approach might include the recruitment of students from overseas, exchange programmes involving Hong Kong students spending part of their course in an overseas institution and vice versa, recruitment of staff from overseas, participation of staff in overseas conferences / exchanges, engagement with Mainland China, as well as the extent to which the student curriculum itself has embraced and embodied international perspectives.

Sector-wide Performance Measures

- 1) Non-local students (in each of: undergraduate; taught postgraduate; research postgraduate) as percentage of total student numbers
- 2) Non-local students broken down by regions (Asia, Europe, North America, South America, Oceania, Africa and others)
- 3) Percentage of Hong Kong undergraduate students with non-local university-approved formal or experiential learning experience
- 4) Percentage of research outputs with international research collaboration which has resulted in a joint publication cited in the Research Assessment Exercise process as of at least international quality

Institution-specific Key Performance Indicators

- 1) Faculty profile by nationality
- 2) Formal joint offering of courses/programs with non-local universities
- 3) Substantial global study experience
- 4) Global presence

4.5 Financial Health and Institutional Sustainability

29. Measures in this domain are designed to illustrate the strength of an institution's governance structures and their capacity to ensure the financial sustainability of the institution in the longer term. The elements forming the measures are drawn from the findings of the "Governance in UGC-funded Higher Education Institutions in Hong Kong" (Governance Report) published by the UGC in 2016, as well as from worldwide good practice in the wider sphere of commerce and government. Specific measures and indicators of enhanced governance in HKUST are detailed in the following Section Five on Governance and Institutional Management.

Sector-wide Performance Measures

- 1) Annual surplus as a percentage of total income
- 2) Subventions from UGC as a percentage of total income
- 3) Current ratio (i.e. current assets / current liabilities)
- 4) Coverage of university's expenditure by reserves and cash & cash equivalents (defined by Hong Kong Financial Reporting Standards):
 - (i)(a) Reserves / monthly expenditure = number of months that expenditure can be supported by reserves;
 - (i)(b) Liquid reserves / monthly expenditure = number of months that expenditure can be supported by liquid reserves; and
 - (ii) Cash & cash equivalents / monthly expenditure = number of months that expenditure can be supported by cash & cash equivalents

Institution-specific Key Performance Indicators

- 1) Approved capital commitment to be funded by non-UGC resources
- 2) Value of working capital pool / operating cash flow ratio
- 3) Dollar value of uncommitted UGC and non-UGC reserves

5. GOVERNANCE AND INSTITUTIONAL MANAGEMENT

30. Effective governance and institutional management is based on a clear understanding of the respective roles of the governing body, of the senate or academic board and of the senior management in an institution. Mutual respect for these differing roles is a keystone of a well-run university. To quote the UGC's Governance Report, "The governing body is responsible for oversight of the institution's activities, determining its future direction and fostering an environment in which the institutional mission is achieved and the potential of all learners is maximised". The president and the executive team are responsible for the management of the institution, both internally and externally, such that its mission is achieved and it benefits from teaching, learning and research of the highest quality. In short, the senior executive should not seek to determine those matters which are properly the concern of the governing body. Equally, the governing body should not become involved in the day-to-day executive management of the institution.

31. In many institutions worldwide, codes of good conduct or practice explicitly recognise this difference between the roles but also their mutual dependence, as well as the need to respect such difference. By highlighting the importance of all involved in institutional governance and management recognising their respective responsibilities, this Agreement seeks to reinforce the importance of differing roles being respected, either through a formal code of good practice or through explicit recognition by all concerned.

32. The UGC and the eight universities have worked together since the UGC published its Governance Report in March 2016. Action has been taken to implement recommendations in each of the following key areas in order to strengthen institutional governance and management.

- Recruitment, induction and continuing professional development of university council members
- Institutional strategy
- Management of risk
- Delegation of authority
- Periodic review of governance arrangements

33. HKUST has responded to the recommendations by taking the following actions:

5.1 Recruitment, Induction and Continuing Professional Development of University Council Members

Recruitment –

34. Under Council's leadership and with the advice of its Task Force on Review of Council Effectiveness, a Skills Template was developed in early 2017 for Council and Council Committees Members to indicate their professional expertise / skills, experience and areas of interest in order to facilitate Council's consideration of the matching of skills, interests to Council and its Committees. Reference has been made to the Skills Template, amongst other information, when Council reviews membership appointments and re-appointments of Council and its Committees. Related information has also been referred to when identifying and nominating new Council / Committee Members.

Induction –

35. The process of induction is crucial to enable Members to discharge their duties during the tenure on Council in an informed manner.

36. HKUST's induction process aims to enhance Members' understanding of: their roles as Council Members; the framework within which the Council operates; the nature of the university, the Council and the higher education sector, locally and internationally; Council's relationships with stakeholders of HKUST; and how HKUST interacts locally with key agencies such as the UGC and EDB, etc.

37. To facilitate new Members' fulfilment of their roles in Council and / or Council Committees respectively, HKUST is committed to a formalised induction process for new Council and Committee Members, upon their appointment. The structured induction program includes:

- the UGC induction on sector-wide issues;
- orientation conducted by senior management of HKUST;
- briefing on Council operation and procedures by the Council Secretary; and
- induction conducted by Council Committees.

UGC's Sector-wide Briefing Session

38. All Members of Council and its Committees have been invited to UGC's Sector-wide Briefing Sessions to get to know more about the higher education sector and other issues that are common to all local institution.

Orientation Visit to HKUST

39. The visit aims to familiarise new Members with the higher education landscape and the structure, organisation and strategic objectives, as well as upcoming opportunities and challenges of HKUST. It seeks to provide an opportunity for new Council (and Court) Members to engage with Members of the senior management and key offices. A tour to the university campus would be arranged so that new Members would be apprised of the latest physical development of HKUST and the facilities related to HKUST's recent development.

Briefing by Council Secretary on Council's Operation

40. New Members would be introduced by the Council Secretary to the mandates of HKUST, as well as the rules, procedures of meetings and related guidelines such as Guidelines and Code of Practice for Council Members. Members would be explained some essential matters related to Council's operation such as declaration of interest.

Induction at Council Committees

41. To facilitate Members' knowledge of the operation of Council Committees, Members are invited to join induction programs of Council Committees, to explain the functions of and key issues to be reviewed in their respective Committees.

42. In addition, an Induction Handbook is being compiled to describe the detailed procedures on Induction and professional development activities of Members of Council and its Committees.

Continuing Professional Development of University Council Members –

43. To enhance Members' knowledge and experience in reviewing university matters, Members have been invited to participate in university-wide or other activities throughout their terms of offices.

(i) Meetings / Committee work

- Meetings of the HKUST Court
- Task Groups on specific university issues
- Schools' Advisory Committees, if applicable
- Meeting with other stakeholders' groups

(ii) Council and other Ceremonial Events

- University Congregation
- Honorary Doctorates Conferment Ceremony
- Honorary Fellowships Conferment Ceremony
- Named Professorships Conferment Ceremony and other university functions

(iii) Seminars (e.g. Science-for-lunch: a town-and-gown event to share the scientific discovery and innovative technologies of HKUST Professors with the community; talks organised by the HKUST Jockey Club Institute for Advanced Study; and visits, e.g. to HKUST's operation on the Mainland)

- (iv) Council Members are also expected to keep abreast of HKUST's latest developments, through receiving online Newsletters and messages of Schools and relevant Offices.

5.2 Institutional Strategy

44. Members of the HKUST Council and Court, the supreme governing and advisory bodies of HKUST, respectively have been involved in the strategic planning and implementation processes. Council has played a vital role in steering the direction in formulating HKUST's 5-year Strategic Plan, with the support of Management. Council Members have offered advice on various strategic issues on different occasions apart from meetings, such as in the University Retreats and other consultation sessions.

45. The Council is kept apprised of progress of various strategies through periodic reports from the Management. Through such reporting mechanism, the Council and its Committees monitor the progress made towards different strategic objectives, and propose adjustment when necessary. As the annual exercise of University Accountability Agreement (UAA) is in place, the strategic initiatives of the University would be shared with the Council through the UAA, the assessment of University performance would be conducted through the sector-wide Performance Measures and Institution-specific Key Performance Indicators.

5.3 Management of Risk

46. A Strategic Risk Management Framework is in place. The framework and associated risk management process ensure a proper overview of Strategic Risks by the Council. The risk management process includes the identification, assessment, mitigation and monitoring of Strategic Risks. The risks are classified as financial risks, reputational risks and operational risks. A Risk Register with risk description, risk impact, overall risk rating (sum of total risk ratings for likelihood, impact and velocity), root causes, mitigating action plans and source(s) of assurance for risk mitigation is completed for each Strategic Risk. The Management, with the support from Internal Audit Office, runs the risk management process to identify and/or update the Strategic Risks and track implementation status of the mitigating plans at least annually. A summary report on the risk management and supporting Risk Registers would be submitted to the Council, via the Standing Committee of Council. The Audit Committee of the Council reviews effectiveness of the risk management process periodically.

47. The risk management process has been embedded in HKUST's regular planning cycle. Summary of the identified Strategic Risks and relevant mitigating actions will be incorporated into HKUST's Annual Report, in response to the Recommendation and the reporting requirement under the UGC Statements of Recommended Practice for the UGC-funded Institutions.

5.4 Delegation of Authority

48. A Task Force on Review of Council Effectiveness was established by Council in 2015 to help review a number of governance issues, which covered the delegation of authority by Council to its Committees and the Management. The authorities delegated to relevant parties, based on the previously approved documents of i) Delegation of Authority to the President and other University Officers and ii) Delegation of Powers by the Council to various Committees, have been incorporated into a set of scope of responsibilities tables to be

reviewed together with the Terms of Reference of Committees annually. The scope of responsibilities of different Committees indicates explicitly the authority being delegated as well as the reporting framework of relevant activities.

5.5 Periodic Review of Governance Arrangements

49. Apart from the annual review of Terms of Reference and membership of its Committees, the Council will review its governance arrangements from time to time, to coincide with HKUST's planning cycle, while reviews of specific areas of its activities would be conducted more frequently, if needed.

6. UGC FUNDING ALLOCATION TO THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

50. As set out in the Provisional Allocation Letter "Recurrent Grants for the 2019/20 – 2021/22 Triennium" dated 8 April 2019, the recurrent grants to be provided to HKUST in the form of block grants during the 2019-22 triennium will be **HK\$7,261.000 million**. This figure is indicative, which may increase or decrease slightly when actual competition results on the allocation of the research postgraduate places and RGC projects are available.

UGC Funding Methodology

51. Please refer to the Annex "Methodology for Determining the Levels of Recurrent Grants for the UGC-funded Universities".

Approved Student Numbers (in fte terms) for the 2019-22 Triennium

	<u>2019/20</u>	<u>2020/21</u>	<u>2021/22</u>
Sub-degree	-	-	-
Undergraduate	8 189	8 272	8 355
Taught Postgraduate	-	-	-
Research Postgraduate#	1 027 + (60)	913 + (168)	818 + (265)
Total*	9 216 + (60)	9 185 + (168)	9 173 + (265)
FYFD	2 034	2 034	2 034

* Figures may not add up to the corresponding total owing to rounding.

The total tentative RPg places in 2019/20, 2020/21 and 2021/22 are 250, 804 and 1 286 respectively and the allocation to the universities are shown in brackets.

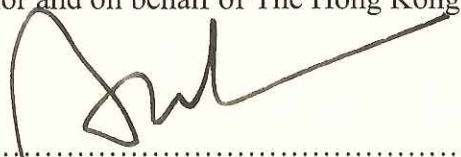
Other UGC Funding

52. Details about other earmarked grants and funding such as the funding to be allocated for Areas of Excellence Scheme, Earmarked Research Grants, knowledge transfer, etc will be announced separately.

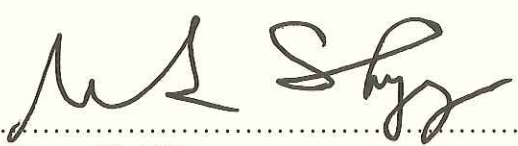
7. FORMAL AGREEMENT

53. This University Accountability Agreement represents an agreement between The Hong Kong University of Science and Technology and the University Grants Committee.

Signed for and on behalf of The Hong Kong University of Science and Technology by

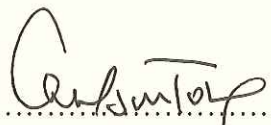

.....
Mr Andrew Liao Cheung-sing
Council Chairman
The Hong Kong University of Science and Technology

25 June 2019
.....
Date

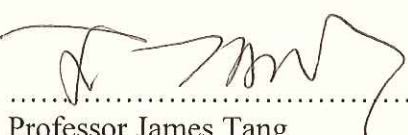

.....
Professor Wei Shyy
President
The Hong Kong University of Science and Technology

25 June 2019
.....
Date

Signed for and on behalf of the University Grants Committee by


.....
Mr Carlson Tong
Chairman
University Grants Committee

27 June 2019
.....
Date


.....
Professor James Tang
Secretary-General
University Grants Committee

24 June 2019
.....
Date

**Methodology for Determining the Levels of Recurrent Grants
for the UGC-funded universities**

The UGC's funding methodology was developed in 1994 and has been used since then for the assessment of the recurrent grants for the UGC-funded universities. It is regularly reviewed and improved to ensure that it is appropriate and relevant to current circumstances.

2. Recurrent grants for each UGC-funded university basically comprise a block grant and funds provided for specific purposes. The purpose of the UGC recurrent grants is to fund universities to support the pursuit of their different roles and missions in teaching and research.

Block grant

3. The New Academic Structure (NAS) has been implemented in the UGC-funded sector since the 2012/13 academic year. Thus, there has been new recurrent funding for the additional year under the NAS ("new pot of money") in addition to the funding ("existing pot of money") for the three years of undergraduate study and other levels of study. In this regard, for the purpose of determining the block grant allocation to universities, a "two pots of money" approach/funding methodology has been applied since the 2012/13 to 2014/15 triennium, as detailed below. Universities still receive a single lump-sum block grant in the end and the "two pots of money" approach will not affect the existing autonomy within which universities deploy their block grant.

"Existing pot of money" for the three years of undergraduate study and other levels of study

4. Under the "existing pot of money", the amount of block grant to the sector as a whole comprises three elements –

- (a) Teaching – about 75%
- (b) Research – about 23%
- (c) Professional Activity – about 2%

Teaching element

5. The bulk of the block grant is allocated for teaching, which is an indispensable duty and mission of all universities. The Teaching element is determined on the basis of the student numbers, their study levels (i.e. sub-degree, undergraduate, taught postgraduate and research postgraduate), modes of study (i.e. part-time and full-time) and disciplines of study. Some subjects are more expensive to teach than others because of special equipment or laboratory needs, or because they are more staff time intensive, etc. Relative cost weightings by broad academic programme category are grouped into three price groups, as shown in the table below -

Academic Programme Category (APC)	Price Group of APCs	Relative Cost Weighting	
		Teaching ⁽¹⁾ Programme	Research ⁽²⁾ Programme
1. Medicine 2. Dentistry	A Medicine & Dentistry	3.6	1.8
3. Studies Allied to Medicine and Health 4. Biological Sciences 5. Physical Sciences 6. Engineering and Technology 7. Arts, Design & Performing Arts	B Engineering & Laboratory Based Studies	1.4	1.4
8. Mathematical Sciences 9. Computer Science and Information Technology 10. Architecture and Town Planning 11. Business and Management Studies 12. Social Sciences 13. Law 14. Mass Communication & Documentation 15. Languages & Related Studies 16. Humanities 17. Education	C Others	1.0	1.0

Notes:

(1) Includes sub-degree, undergraduate and taught postgraduate programmes.

(2) Includes research postgraduate programmes.

Research element

6. The Research element, i.e. the Research Portion (R-portion), is disbursed to the universities as infrastructure funding to enable universities to provide both the staffing and facilities (e.g. accommodation and equipment) necessary to carry out research, and to fund a certain level of research. To promote research excellence, the UGC has been gradually allocating the R-portion to its funded universities on a more competitive basis according to their success in obtaining peer reviewed Research Grants Council (RGC) Earmarked Research Grants (ERGs). It was originally intended that over a period of nine years (starting from the 2012/13 academic year), about 50% of the R-portion would be ultimately allocated in this manner. In 2017, in response to the stakeholders' concerns expressed in the Review of the RGC (Phase I), the UGC approved the interim arrangement to "freeze" the percentage of the competitive part of the R-portion at 26% since the 2017/18 academic year, pending the completion of a further review on R-portion. The remaining 74% of the R-portion will be allocated with regard to the universities' performance in the Research Assessment Exercise (RAE). For the 2019/20 to 2021/22 triennium, before the

results of the forthcoming RAE in 2020 are available, the results of the RAE 2014 will continue to inform allocation of the rest of the R-portion.

Professional Activity element

7. This element of funding is intended to fund professional activities not covered by the Teaching element and Research element and is calculated based on the number of academic staff.

“New pot of money” for the additional year under the New Academic Structure

8. The funding for the additional year under the NAS, treated as a separate pot of money, is allocated wholly as “teaching funding” among faculties with price weightings of 1.4 and 1.0 for (i) Medicine, Dentistry, Engineering and Laboratory-based studies; and (ii) Others respectively.

Allocation of block grant within universities

9. The above-mentioned methodology only serves as a basis for determining the block grant allocation to the UGC-funded universities. Once allocations are approved, universities have autonomy in and responsibility for determining the best use of the resources vested in them.

Grants for specific purposes and extra-formulaic adjustments

10. The UGC is aware that its formula-based funding model cannot address all the various needs of the universities. The UGC’s recommendations therefore make provision for the following specific requirements for the 2019/20 to 2021/22 triennium –

(a) Earmarked Research Grants (ERG)

The ERG is distributed by the RGC to support research projects and research activities of the eight UGC-funded universities. The ERG is funded by the investment income of the Research Endowment Fund (REF). To keep the amount of funding of the ERG up to the current price level, an amount of \$72.7 million will be deployed within the Cash Limit for ERG for each of the academic years in the 2019/20 to 2021/22 triennium.

(b) Teaching Development and Language Enhancement Grant (TDLEG)

UGC attaches great importance to teaching and learning. A sum of \$781.2 million will be provided for the TDLEG in the 2019/20 to 2021/22 triennium.

(c) Knowledge Transfer

To support expansion of institutional capacity and to broaden universities’ endeavours in knowledge transfer, the UGC will continue to reserve a sum of \$68.5 million (including the inflation adjustment) for universities for each of the academic years in the 2019/20 to 2021/22 triennium.

(d) Central Allocation Vote (CAV)

Similar to the past triennium funding exercise, the UGC will set aside about 1.0% of the Cash Limit (*i.e.* \$600 million in the 2019/20 to 2021/22 triennium)

centrally to support new initiatives during the triennium, in addition to setting aside an average annual funding of \$100 million for the Areas of Excellence projects.

(e) Others

The UGC also agreed to fund a number of small extra-formulaic adjustments relating to specific activities of universities, totalling around \$72 million each year.
