

**Quality Assurance Council
Third Audit Cycle**

**Report of Quality Audit of
The Hong Kong University of
Science and Technology**

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The Quality Assurance Council is a semi-autonomous non-statutory body under the aegis of the University Grants Committee of the Hong Kong Special Administrative Region of the People's Republic of China.

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PREFACE

Background

The Quality Assurance Council (QAC) was established in April 2007 as a semi-autonomous non-statutory body under the aegis of the University Grants Committee (UGC) of the Hong Kong Special Administrative Region of the People's Republic of China.

The UGC is committed to safeguarding and promoting the quality of UGC-funded universities and their activities. In view of universities' expansion of their activities and a growing public interest in quality issues, the QAC was established to assist the UGC in providing third-party oversight of the quality of the universities' educational provision. The QAC aims to assist the UGC in assuring the quality of programmes (however funded) offered by UGC-funded universities.

Since its establishment, the QAC has conducted three rounds of quality audits, the first audit cycle between 2008 and 2011, the second audit cycle between 2015 and 2016 and the sub-degree audit cycle between 2017 and 2019. By virtue of the QAC's mission prior to 2016, the first and second audit cycles included only first degree level programmes and above offered by the UGC-funded universities. Following the Government's recognition of the need for greater systematisation and externality in monitoring the quality of sub-degree level programmes, as well as the recommendations from a Working Group comprising representatives from the UGC, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications and the Heads of Universities Committee, the Government gave policy support for and invited the UGC to be the overseeing body of the quality audits of UGC-funded universities' sub-degree operations with the QAC as the audit operator in 2016.

Conduct of QAC Quality Audits

The QAC's core operational tasks derived from its terms of reference are:

- the conduct of universities' quality audits
- the promotion of quality assurance and enhancement and the spread of good practices

Audits are undertaken by Audit Panels appointed by the QAC from its Register of Auditors. An Audit Panel consists of four members, including two local members with a background in the Hong Kong higher education system and two non-local members with extensive and senior experience of quality and academic standards. Lay members may also be appointed where it is deemed appropriate.

The QAC's approach to quality audit is based on the principle of 'fitness for purpose'. Audit Panels assess the extent to which universities are fulfilling their stated mission and purpose and confirm the procedures in place for assuring the quality of the learning

opportunities offered to students and the academic standards by which students' level of performance and capability are assessed and reported. The QAC Audit also examines the effectiveness of a university's quality systems and considers the evidence used to demonstrate that these systems meet the expectations of stakeholders.

Full details of the audit procedures, including the methodology and scope of the audit, are provided in the QAC Third Audit Cycle Audit Manual which is available at <https://www.ugc.edu.hk/doc/eng/qac/manual/auditmanual3.pdf>.

EXECUTIVE SUMMARY

This is the report of a quality audit of The Hong Kong University of Science and Technology (the University; HKUST) by an Audit Panel appointed by, and acting on behalf of, the QAC. The report presents the findings of the quality audit, supported by detailed analysis and commentary on the Audit Criteria below as well as the Audit Theme on ‘Collection, Analysis and Usage of Data’.

- How effectively does the university review and enhance its framework for managing academic standards and academic quality?
- How effectively does the university review and enhance its arrangements for programme development and approval, monitoring and review?
- How effectively does the university review and enhance teaching and learning?
- How effectively does the university review and enhance student learning assessment?
- How effectively does the university review and enhance its arrangement for supporting students?

The audit findings are identified as features of good practice and recommended actions for further consideration by the University.

Summary of the principal findings of the Audit Panel

1. Review and enhancement of the University’s framework for managing academic standards and academic quality

The Audit Panel was able to confirm that the University’s vision, mission, and strategic objectives, assisted by the Teaching and Learning (T&L) Strategy and the Academic Quality Manual (AQM), underpin its planning processes. While the University demonstrates central oversight in strategic planning, there is an opportunity to further enhance and strengthen its oversight in other areas, particularly in the academic management of courses and programmes that are primarily devolved to school and department levels, with only limited central oversight. The Audit Panel notes that, while this approach allows the Schools/Academy of Interdisciplinary Studies (AIS) to adapt their provision to developments in individual disciplines, the University’s emphasis on interdisciplinary study requires consistency of approach, albeit with some degrees of flexibility under a common unifying central theme, quality, and standards across the institution. The Institutional Strategy and Teaching and Learning Strategy are operationalized through a portfolio of policies and processes, which are, reviewed and revised in response to changes in the internal and external environments, such as the introduction of new pedagogy due to technical improvements, advancements in academic and practical knowledge and the development of new industry and career opportunities.

Benchmarking for setting and maintaining of academic standards takes place, where available, through external accreditation agencies and unit-specific advisory bodies. For subjects where this is not possible, benchmarking occurs during the periodic review process. The Audit Panel found relatively few examples of a planned, comprehensive approach to the improvement of institutional quality operations.

2. Review and enhancement of the University's arrangements for programme development and approval, monitoring and review

The Audit Panel was able to confirm that the University develops new programmes and combinations of programmes in line with its strategic drivers and with a strong focus on interdisciplinarity. The University has established policies and procedures for programme development, approval, monitoring and periodic review, as detailed in the AQM for undergraduate programmes and the Graduate School website for postgraduate programmes. In practice, these procedures generally involve significant externality. New programmes are explicitly approved by the Senate. A significant feature of annual programme monitoring is effective action planning. Periodic review is a more variable exercise and, in some cases, external accreditation and the reports of accreditation bodies are used in lieu of internal periodic review. The Panel encourages the University to standardise its approach to periodic review. Various changes have been made to the University's arrangements for programme development, approval, monitoring and review in recent years including revised guidelines for proposing new postgraduate programmes and revised annual monitoring templates. Such enhancements are part of evolving systems, occurring as needs are identified. Changes to practice are in response to identified needs and may be based on experience, new initiatives or imperatives, or as developments in higher education emerge. However, there is a need to establish better systemic review and to implement planned change in a more proactive and rigorous manner.

3. Review and enhancement of teaching and learning

The University T&L Strategy establishes the framework for the review and enhancement of teaching, learning and assessment. The Audit Panel found that policies and/or guidelines are in place and examples of good practice and enhancements are available in various dimensions of teaching and learning. Annual reports produced by units include self-reflection on teaching and learning and are monitored by the Senate Committee on Teaching and Learning Quality (CTLQ). Summaries of findings are reported to the Senate for monitoring even though some of the practices are not guided by explicit policies for example, programme review and professional development. Good practice identified is made available to all faculty/staff through the AQM. Periodic review of master's programmes covers topics such as curriculum, assessment and quality assurance, but various dimensions of teaching and learning, such as learning resources, the design and construction of the learning experience and how these relate to programme outcomes and individual and collective student learning needs, could be considered more explicitly.

The Audit Panel found evidence showing the University has updated its e-Learning Strategies and Policies for Online Delivery from time to time. With the launch of mixed mode/online teaching during the pandemic, the University has developed regulations and pedagogical support for the implementation of these modes of delivery. A Framework for Virtual Teaching and Learning consultancy report was commissioned to support the development of virtual modes of delivery. The University is keen to use technologies to enhance students' learning experiences. Notwithstanding this the University also values face-to-face teaching and sees this approach as the default delivery mode of courses/programmes at the moment. University Management is aware of the risks of the development of courses to be delivered in real-time online and mixed mode formats and has stated some possible risks in relevant policies to draw these to the attention of programme/course planners and developers. The Audit Panel noted that the University has updated its policy to recognise good teaching by awarding the education-based titles of Assistant and Associate Professor.

4. Review and enhancement of student learning assessment

The Audit Panel was able to confirm that the formal regulations concerning assessment are bound to the overall academic regulations. These are used to specify practices in the AQM, which has both guideline and regulatory aspects, and introduces outcome-based assessment and learning outcomes, specifies the role of assessment in demonstrating academic standards, and specifies the roles of faculty members in various assessment-related tasks. Overall, there is a strong steer from the University in the adoption by faculty members of outcome-based education (OBE). Sound practices are adopted in informing students about assessment in general and their specific assessment tasks, and in the timely return of their work with appropriate feedback. However, there is scope for the tightening of some aspects of assessments including the development of post-moderation assessment systems, standardising practices in relation to infringements of academic integrity, increasing the reliability of its assessment decisions, and ensuring that OBE is fully deployed in assessment. Change and revision to the University's approach to student learning assessment are largely responsive to identified needs and can take due consideration of pedagogical developments.

5. Review and enhancement of the University's arrangement for supporting students

The Audit Panel was able to confirm that the University is active in providing both academic and non-academic support to students. For undergraduate students, language enhancement (English) courses are incorporated into the Common Core Programme (CCP) curriculum and are benchmarked with IELTS band scores. For research postgraduate students, there are mandatory research writing skills and English communication courses. In general, all levels of students can seek help from the Center for Language Education. Mechanisms for handling student complaints and conflicts between research postgraduate students and their supervisors are available through programs, Schools/AIS and the university procedures are well established. The assignment of faculty advisors for every new undergraduate student assists in the early

identification of arising issues. The Dean of Students' Office (DSTO) and academic units provide support for students' personal development. All students can join activities organised by DSTO. The Centre for Education Innovation (CEI) also supports activities aimed at cultural diversity. Students are represented in the membership of University, School and Departmental level committees. The student committee members would benefit from specific preparation for their roles, which would further strengthen their contribution and provide them a good learning experience as student leaders. Overall, the Audit Panel concluded that the University has policies in place to drive the delivery of academic, personal and professional support for students at all stages of their study.

6. The Audit Theme – Collection, analysis and usage of data

A Data Governance Policy, owned by the Data Governance Committee (DGC), defines the necessary organisational structure, rules, and guidelines for supporting secure and productive use of organisational data. Institutional data is collected and analysed by the Office of Institutional Data and Research (OIDR), and is made available through the Performance Analytics, Intelligence, and Reporting (PAIR) Portal through a wide range of dashboards. The Audit Panel found examples of the use of data to inform decision-making across the University, in processes that include monitoring progress with strategic plans, utilisation of data to enhance course design and development, monitoring student achievement, and following graduate career destinations. Numerous examples of the use of data are provided in the Critical Self Review (CSR) Report that accompanies the Self-Evaluation Report (SER).

INTRODUCTION

Explanation of the audit methodology

This is the report of a quality audit of HKUST by an Audit Panel appointed by, and acting on behalf of, the QAC. It is based on a SER which was prepared by the University and submitted to the QAC on 27 January 2023. Initial Private Meetings of Panel members were held on 27 and 28 March 2023 to plan for the audit visit and this was followed on 30 March 2023 by a Preparatory Meeting with the University to discuss the detailed arrangements.

The Audit Panel was able to scrutinise a range of relevant documentation provided by the University, including its SER and Appendices, the Core Information, Audit Trail documentation, and additional information provided before and during the Audit Visit.

The Audit Panel conducted a virtual Audit Visit with the University between 30 May 2023 and 9 June 2023. They met the President, senior team and Deans; a representative group of students on taught programmes; a representative group of research postgraduate students; academic managers including heads of departments and programme leaders; teaching staff; research postgraduate managers and supervisors; external stakeholders; and staff from academic support services.

The Audit Panel evaluates:

- How effectively does the university review and enhance its framework for managing academic standards and academic quality?
- How effectively does the university review and enhance its arrangements for programme development and approval, monitoring and review?
- How effectively does the university review and enhance teaching and learning?
- How effectively does the university review and enhance student learning assessment?
- How effectively does the university review and enhance its arrangement for supporting students?

The Panel identifies its audit findings, including features of good practice and recommended actions for further consideration by the University.

Introduction to the University and its role and mission

HKUST was founded in 1991 on the Clear Water Bay Peninsula. In 2018, the University signed a tripartite agreement with the Guangzhou Municipal Government and Guangzhou University to establish a new campus in Nansha. On 1 September 2022 The Hong Kong University of Science and Technology (Guangzhou) (HKUST(GZ)) opened. The new campus emphasises HKUST's strategic commitment to greater role differentiation through inter-institutional collaboration.

The University's mission is to advance learning and knowledge through teaching and research, particularly in science, technology engineering, management and business studies. At postgraduate level, to assist in the economic and social development of Hong Kong.

The University, as of 30 September 2022, had 17 581 students in the following categories: Undergraduate 10 478; Taught Postgraduate 4 304; Research Postgraduate 2 245; and 554 Research Postgraduate students at the HKUST(GZ) campus. HKUST, in 2021, employed 3 525 staff, comprising 745 full-time equivalent faculty staff, 137 instructors and teaching support staff, 673 research staff and 1 970 non-academic staff.

The University's vision is to be a leading university with significant international impact and strong local commitment.

1. REVIEW AND ENHANCEMENT OF THE UNIVERSITY'S FRAMEWORK FOR MANAGING ACADEMIC STANDARDS AND ACADEMIC QUALITY

- 1.1 The University's Strategic Plan and the various UGC-initiated exercises form the basis of planning processes at HKUST. Annual procedures for monitoring the performance of Schools/AIS, Departments/Divisions, and programmes are used to promote a culture of performance and development. The University considers its Annual Reports on Teaching and Learning Quality, and the Annual Reports on Teaching and Learning, produced by the CTLQ for the Senate, to be the cornerstone of its framework for quality assurance and enhancement. The online Framework for Assuring Quality and Academic Standards has been rebranded as the University's online AQM. Admissions matters, including policy are discussed by the Undergraduate Admissions Sub-Committee (UAS) and the Postgraduate Admissions Sub-Committee (PAS). Research Postgraduate programmes each have their own admissions committee.
- 1.2 The Mission of HKUST is to advance learning and knowledge through teaching and research, particularly: in science, technology, engineering, management, and business studies; and at the postgraduate level; to assist in the economic and social development of Hong Kong. The Vision is to be a leading university with significant international impact and strong local commitment.
- 1.3 In order to achieve the Vision, the Strategic Plan sets five strategic objectives, namely, to be a university of talents, to be an international leader in education and research, to incorporate innovation and entrepreneurship in the university's spirit, to be an exemplar of best-in-class standards, practices, and operations, and to be a champion of diversity. It speaks of an ambition to 'reset the academic framework' by implementing a dual approach to pursue curiosity-driven investigations in any discipline, while also mounting mission-encouraged, multi-faceted responses in systematic ways to identify challenges of great magnitude and across disciplines. In support of the Strategic Plan, new departments,

divisions, centres, and institutes have been created to support its implementation. For example, an ‘Extended Major’ framework has been introduced to provide flexibility around established majors, and there is a new Integrated Bachelor-Master Pathway. The Strategic Plan is underpinned by a T&L Strategy.

- 1.4 HKUST(GZ) in Guangzhou has been established as a significant development of the University as a major strategic development. It is viewed as an extension of the interdisciplinary approach taken by the University and it is hoped that the exchange of staff, students and ideas will be of benefit to both campuses of the University.
- 1.5 HKUST(GZ) has an academic framework that complements the academic programmes at the HKUST campus, with role differentiation through establishing new intellectual domains to fit HKUST’s diverse goals and ambition while avoiding program duplication. HKUST(GZ) is characterized by its cross-disciplinary approach, which involves combining various elements to create new programmes. There are currently four Hubs and sixteen Thrust Areas, which are cross-disciplinary in nature, with over 540 research postgraduate students enrolled as at September 2022. To maintain the ‘Unified Universities, Complementary Campuses’ concept, an initiative has been developed for Hong Kong students to spend time at the HKUST(GZ), and to enable visits by mainland students to the HKUST campus and Hong Kong students to Guangzhou to meet with industry partners.
- 1.6 Staff at all levels were aware of the Strategic Plan (2021-2028), Mission, and Vision, and were able to provide examples of the way in which they impacted on their daily work. The Strategy is reviewed regularly, and has been expanded to cover two triennia of the UGC’s planning cycle.
- 1.7 The Ordinance and Statutes of HKUST define the memberships, roles and responsibilities of the Chancellor and the Court, the Council, the Executive (comprising the President, Provost, Vice-Presidents, and others), the Senate, Faculties, Schools, and Convocation. The Council is the supreme governing body of the university and is advised by the Court, while the Senate is the supreme academic governing body. The Council appoints the President, Provost, and Vice-Presidents.
- 1.8 The President chairs the Senate which is empowered by law to:
 - plan, develop and review academic programmes;
 - regulate the teaching and research conducted in the University;
 - regulate the admission of persons to approved courses of study and their attendance at such courses; and
 - regulate the examinations leading to the degrees and other academic awards of the University.

- 1.9 The President also chairs the University Administrative Committee, which includes all senior management and Directors of administrative units.
- 1.10 The academic structure of HKUST comprises AIS¹ and four Schools: School of Science (SSCI); School of Engineering (SENG); School of Business and Management (SBM); School of Humanities and Social Science (SHSS). The School Deans, the Dean of Students, together with the Dean of HKUST Fok Ying Tung Graduate School (FYTGS), the Dean of AIS, and the Director of the Undergraduate Recruitment and Admissions Office (URAO) and other academic support units report to the Provost.
- 1.11 Each School has a School Board that reports to the Senate. Individual programmes are managed by Departmental Undergraduate and Postgraduate Committees that report to school-level Undergraduate and Postgraduate Committees, and from there to university-level committees. Some departments have separate postgraduate committees for each of their taught postgraduate programmes. There are also Programme Advisory Committees and Student Staff Liaison Committees.
- 1.12 The CSR conducted by HKUST in preparation for producing the SER provides evidence that the committees at school- and department-level are overseeing the academic management of programmes, and that they are evolving in response to changing circumstances, for example, the introduction of new courses, modifications to existing courses, and changing the modes of assessment. An Audit Trail provided by HKUST to the panel describes the different ways in which the Schools, the AIS, and the CEI responded to the pandemic.
- 1.13 Academic management of courses and programmes are largely devolved to school and department levels, resulting in variations in marking practices, the handling of cases of suspected academic misconduct, and other areas, as described in paragraphs 4.9 and 4.10. The Audit Panel notes that, while this approach allows the Schools/AIS to adapt their provision to developments in individual disciplines, the University's emphasis on interdisciplinary study requires consistency of approach, quality, and standards across the institution.
- 1.14 Sector-wide performance measures for the University are described in the University Accountability Agreement (UAA). There are also institutional specific key performance indicators (KPIs). They cover five domains: the quality of the student experience of teaching and learning; the quality of research performance and of research postgraduate experience; knowledge transfer and wider engagement; enhanced internationalisation; and financial health and institutional sustainability.

¹ Renamed from the Interdisciplinary Programs Office with effect from 1 July 2023.

- 1.15 The relevant policies and procedures for monitoring the performance of teaching staff are the Guidelines for Faculty Performance Assessment, the Policy on Academic Review, the Policy on Substantiation for Academic Staff, and the document Teaching Track Faculty and Professorial Titles for Teaching Track Faculty.
- 1.16 The performance of faculty staff members is evaluated annually in three areas, teaching and education, research and scholarship, and service. The evaluation of each area has been done holistically and has not been based simply on limited data, such as number of publications or student surveys. Grade descriptions for the five levels of performance, namely Excellent, Very Good, Good, Satisfactory, and Unsatisfactory, are provided in the Guidelines for Faculty Performance Assessment. The purpose of the annual review is to provide performance feedback for continued improvement, and salary adjustment. Further information about the annual review process is provided in the Policy on Academic Review. Performance evaluation of teaching staff includes data from a Student Feedback Questionnaire that is completed at the end of each taught course, with the same goal of improving educational quality.
- 1.17 The academic framework is supported by a comprehensive portfolio of policies. They are published online within the AQM and the HKUST FYTGS website. Those relating to faculty are brought together in the Academic Personnel Policy and Procedure Manual. The policies and other quality documents are reviewed and enhanced in response to internal or external changes, rather than reviewed on a set cycle. For example, changes to the programme approval process that were made to facilitate the need to develop a large number of new programmes for the new Guangzhou Campus.
- 1.18 Whilst responding to such needs as they occur, such an approach means that some documents may not be revised for an extended period of time. For example, in the policy on academic review, as described in the Academic Personnel Policy and Procedure Manual, most of the sections have not been updated since 2013. This manual contains some sections that have not been reviewed since 1995. The University told the panel that the policies had been subject to review but that no amendment had been necessary. It would be helpful in such situations to record the date of review even if no alterations are made. Furthermore, a systematic measured approach is likely to be more comprehensive than an approach to updating policy as needs arise. Therefore, the Audit Panel **recommends the University develop policies and procedures to ensure systematic and regular review and enhancement of the University's quality operations.**
- 1.19 Academic standards are assured through benchmarking locally and internationally through professional accreditation or regular peer review. Many of the programmes in the SENG, the SBM and the AIS are externally accredited. The accreditation process includes benchmarking against similarly accredited programmes delivered by other institutions.

- 1.20 Few of the programmes delivered by the SSCI and the SHSS are externally accredited. For these programmes, the external benchmarking takes the form of review by undergraduate education advisors. When the School determines that a review is required, the relevant Department/Division Head will nominate potential external reviewers. Once the nominations have been approved by the Dean, the reviewers will make a judgement on the academic standards of the programme, based on a visit to the department, meetings with internal and external stakeholders, and a comprehensive set of documentary evidence describing the course and how it has been delivered, including course outlines, assessment procedures and samples. This process constitutes the University's approach to periodic review for programmes that are not externally accredited.
- 1.21 The general requirements for admissions are described in the Academic Regulations and more detailed requirements for each programme are available on the University website. The admissions policy, general admissions requirements, quotas for Schools and programmes, Joint University Programmes Admissions System (JUPAS) cut-off scores, and intake targets are overseen by the UAS, a sub-committee of the Committee on Undergraduate Studies (CUS), and the PAS, a sub-committee of the Committee on Postgraduate Studies, and the operational aspects are carried out by the URAO and the FYTGS. Responsibility for admissions is shared with the Schools. The URAO receives and collates all required documentation, then the Schools make the decisions and pass their selections back to the Office.
- 1.22 The CSR contains examples of the analysis of admissions data to individual programmes and resulting in changes to the formula for calculating the admissions score to fine tune the profile of students admitted. The two audit trails provided to the Audit Panel by HKUST contain examples of ways in which admissions policy has been enhanced in response to external factors, including the COVID pandemic and other internal needs, informed by data analysis of recent intake quality and the performance of students in specific disciplines.
- 1.23 The Audit Panel was able to confirm that the University vision, mission, and strategy, assisted by the T&L Strategy and the AQM, underpin its planning processes. The Institutional Strategy and Teaching and Learning strategy are operationalised through a portfolio of policies and processes, which are reviewed and revised in response to changes in the internal and external environments. Benchmarking for setting and maintaining of academic standards takes place, where available, through external accreditation agencies. For subjects where this is not possible, benchmarking occurs during the regular and periodic review process. The Audit Panel found relatively few examples of a planned, comprehensive approach to the improvement of institutional quality operations. Academic management of courses and programmes are largely devolved to school and department levels, with only limited central oversight. The Audit Panel notes that, while this approach allows the Schools/AIS to adapt their

provision to developments in individual disciplines, the University's emphasis on interdisciplinary study requires consistency of approach, quality, and standards across the institution. As the subsequent sections of this report will describe, it was clear to the Audit Panel that institutional oversight of a number of areas of academic standards and quality requires some strengthening, for example, student appeals and complaints, periodic review of programmes, outcomes-based assessment, and academic infringements. Therefore, the Audit Panel **recommends the University strengthen its oversight of the awards it makes to assure itself of the academic standards and quality of the programmes delivered by the Schools/AIS, departments/divisions and other units.**

2. REVIEW AND ENHANCEMENT OF THE UNIVERSITY'S ARRANGEMENTS FOR PROGRAMME DEVELOPMENT AND APPROVAL, MONITORING AND REVIEW

- 2.1 Portfolio development occurs continually, in line with the requirements of the Strategic Plan, as new faculty with specific discipline strengths are hired. The development of new programmes, and new combinations of programmes aligns with and is explicitly directed by strategic drivers as exemplified in the Planning Exercise Proposal (PEP) 2022-25, which identifies and explains three 'futures': the 'Future of Living: Sustainable Conduct'; the 'Future of People: Human Capital' and the 'Future of Work: Intelligent Industrialisation'.
- 2.2 The University has introduced 13 new programmes since 2021, including a Bachelor of Science in Sustainable and Green Finance, the first in Hong Kong, and an integrated accelerated 4-year 'Bachelor-Masters pathway' for some programmes, for example the Bachelor of Science in Risk Management and Business Intelligence with Master of Science in Financial Technology.
- 2.3 The University has introduced a 'Major + X,' or 'extended' degree framework, where students can combine a principal field of study (the Major) with an emerging contemporary field, such as Artificial Intelligence, Digital Media and Creative Arts, and Smart City. Following a consultation period, a strong case for the introduction of extended degree programmes was presented to, and approved by, the Senate in 2020. The Audit Panel was informed that the development of extended programmes was strategic and measured, with appropriate admission requirements, and was designed to equip students with vision, knowledge and skills in application of an emerging field, allowing them to respond swiftly to, and make decisions concerning, contemporary developments in innovation and technology. Employers met by the Audit Panel were keen to point out that a key feature of HKUST graduates is their interdisciplinary mindset and their ability to think across boundaries. These notions align with the University's developments in the curricula offered.

- 2.4 Policies and procedures for programme development, approval, monitoring and periodic review are detailed in the revised AQM for undergraduate programmes and the FYTGS website for postgraduate programmes. For undergraduate programmes, an initial proposal is made from the relevant School/AIS on a specific form that requests information about: educational objectives; fitness with the University's mission; programme structure and curriculum; market demand; admission arrangements; proposed student numbers; stakeholder consultation (including industry representatives); benchmarking; and required resources. Supporting materials are also requested. Some of the information and opinion is supplied by professional service units such as Career Center (for market research), URAO, the CEI, and the library. The proposal is considered by the CUS which may reject the initial proposal or invite a final proposal, each with developmental feedback. Final proposals must include a response to the feedback from the CUS and a detailed plan, including learning outcomes, programme management and the creation of necessary committees, and mechanisms for collecting feedback from students. Once the final proposal is approved by the CUS, it is passed to Senate for final approval.
- 2.5 The SER reported that 'credit-bearing programmes are designed in accordance with the Hong Kong Qualifications Framework (HKQF)'. In verifying this statement, the Audit Panel asked senior staff, including members of the CUS, about this alignment but the staff were unaware of the existence of the HKQF, as were some teaching staff who had been involved in programme design. The Audit Panel heard that programme alignment with the HKQF is largely an administrative exercise that occurs within the Registry, and the University provided a narrative that showed how its procedures for determining award titles, and credit assignment and transfer align with the HKQF. However, there is no stated step of alignment by the Registry in the programme development and approval process. Nonetheless, and given that the HKQF is stipulated by QAC as a key facet of the audit methodology and that the University aspires to have its programmes designed in accordance with the HKQF, the Audit Panel considered that the match of course and programme learning outcomes to the generic level descriptors in the HKQF should form part of an academic exercise and determined that this process did not take place, even though academic input is necessary in aligning with other infrastructure, such as the University's graduate attributes or external accreditation body criteria. Although the Audit Panel did not detect any inconsistency between the programmes and the HKQF, it considers that such alignment may be serendipitous, and the University is missing an opportunity to ensure that its programmes are aligned. The Audit Panel suggests that the University may wish to apply a mechanism to ensure alignment of its programmes with the generic level descriptors of the HKQF.
- 2.6 There are mechanisms and forms for making changes to programmes and to close programmes. Closure policies have been applied to a small number of undergraduate major and minor programmes and to a postgraduate programme in the last three years. In 2019, the University decided that minor programmes

with low (less than ten per year for three consecutive years) numbers of graduates should be considered for withdrawal and a ‘sunset policy’ was developed to deal with them. While existing policies and procedures could be applied to close these programmes, the development of a specific policy was considered administratively more efficient.

- 2.7 For postgraduate taught and research programmes, there are similar processes for approval and change, which go to the Senate Committee on Postgraduate Studies and then the Senate for approval. In general, the Audit Panel found the procedures for programme approval and change fit-for-purpose.
- 2.8 The University claims it is ‘committed to annual evidence-based monitoring and periodic review of its educational provision’, processes that are overseen by the Senate CTLQ. Programme annual monitoring is paper-based and asks for an evaluative commentary on a range of appropriate factors, including admissions, advising, student progression and achievement, student feedback, and the previous year’s action plan. The reports may include multiple programmes cognately linked, indeed single reports at undergraduate and masters’ levels are common within Departments and Divisions.
- 2.9 The Audit Panel viewed a small sample of annual monitoring reports for both undergraduate and master’s programmes and noted: strong action planning, with attention to points raised in the previous year; the identification of good practice items; and a thorough evaluation of programme performance.
- 2.10 On receiving programme annual reports from affiliate Departments/Divisions, Schools/AIS compile School/AIS-level annual reports incorporating the key outcomes of the programme annual reports. The Audit Panel viewed a sample of these detailed reports from both Schools and the AIS and again noted strong year-on-year action planning focusing on how the School/AIS could enhance performance across all its Departments or Divisions and tackling common administrative matters at the level of the School/AIS. The reports are presented to School Administrative Committees, where the Audit Panel noted robust debate on their contents. Amended reports are presented and debated at the Senate CTLQ, where critical reports are praised and good practice items are extracted and form part of the Committee’s Annual Report on Teaching and Learning to the Senate. The Committee also feeds back its comments on the quality of reports to School/AIS level.
- 2.11 The periodic review process varies by School, for example in the SENG it is aligned with accreditation by the Hong Kong Institute of Engineers, but in each case the process is required to conform to a set of core principles which involve the production of a self-evaluation document, scrutiny and visit by a panel with external members, the production of a report by the panel and attention to action planning.

- 2.12 Postgraduate programmes are reviewed every five years, but for undergraduate programmes the period is at the discretion of the relevant School and occurs typically every three or four years. Periodic review continued during the closure of Hong Kong owing to the pandemic and was conducted virtually. However, the pandemic did delay some reviews, which have yet to take place.
- 2.13 The Audit Panel viewed a small sample of periodic review reports (both the reports themselves and the reports of the external reviewers, where relevant) at undergraduate and taught master's levels and noted strong externality in the composition of the panel and, in general, thorough qualitative reporting on the programmes in question, with action planning. The exception was for one undergraduate programme where the report took the form of a letter from the accrediting body that numbered four recommendations. No positive practice was mentioned that might be disseminated and there was no narrative to explain the recommendations. The Audit Panel considered this form of reporting of limited value to the University and that it did not satisfy one of the core principles, namely, 'Production of a report...including confirmation that the curriculum and academic standards meet international benchmarks, and recommendations for enhancement with an action plan.'
- 2.14 Further, the Audit Panel noted that accrediting bodies use different criteria in their accrediting processes than those that the University may wish to apply to periodic review, and the focus of the accreditation is not necessarily the student experience but often the needs of a profession. The Audit Panel heard that it is normal University practice for periodic review reports to take, where possible, the form of accreditation reports, and noted that the majority of undergraduate programmes are accredited.
- 2.15 For postgraduate research programmes, the University conducted a review in 2019, but there are currently no plans to repeat the exercise, and so there is no periodic review for these programmes.
- 2.16 Although professional services staff met by the Audit Panel had a good understanding of their role in programme development and approval, they did not recognise a role in programme review. Such roles involve, for example reporting and commenting on the provision and use by students of library facilities, support services and careers advice.
- 2.17 The Audit Panel heard that programmes are taken stock of as part of the PEP, and while this may be the case for some programmes, the PEP process is not meant for a systematic review of each of the University's programmes such that they remain current.
- 2.18 Periodic Review reports are considered by the Senate CTLQ. The Audit Panel noted detailed scrutiny of reports at this stage. However, the Panel heard that information relating to periodic review of undergraduate programmes, such as

when they are taking place and their scope, has to be acquired from the University's various Schools and departments, rather than being centrally determined and recorded. Unlike taught postgraduate programme review, there is no central oversight or control of periodic review activity of undergraduate programmes, including scheduling. The Audit Panel considered that this could lead to variations in practice, including slippage in scheduling. The Audit Panel noted that while incremental change, for example occurring at annual monitoring, was well-developed there was scope for firmly establishing points where each whole programme is fully reviewed. The Audit Panel **recommends the University ensure that its periodic review processes encompass all programmes of study, produce reports that evidence a full review of the programmes in question, in line with the University's requirements, and are brought into University oversight.**

- 2.19 In its SER, the University claimed that changes to processes involved in programme development, approval, monitoring and review occurred incrementally as users, including external accreditation panels, pointed out improvements that could be made. User feedback is also used as an indication of the on-going effectiveness of the procedures, though there is no evidence that users are asked explicitly to comment on the processes. Improvements arise from these channels, as evidenced by the University in its CSR produced for this audit, but these are typically not about the processes but about the relevant programme under test in each case and no systematic review of the University's processes is in evidence.
- 2.20 Nonetheless, as a result of the pandemic the following policies have been created: Policy for Undergraduate Courses to be Delivered in Real-time Online or Mixed-mode Format; Policy for Taught Postgraduate (TPg) Programmes and Postgraduate (PG) Courses to be Delivered in Synchronous Online Mode. The Audit Panel viewed these developments as prudent. Also, course approval forms have been updated to consider modern delivery and assessment methods by the inclusion of fields for indicating blended learning, experiential learning and online delivery. Other changes made within the last few years include: revised guidelines for proposing new postgraduate programmes to include the professional qualifications of external referees and conflict of interest declarations; revisions to templates for programme and School/AIS level annual reporting on learning and teaching to facilitate more clear reporting; and specifying that panel chairs for postgraduate programme periodic reviews have recent quality assurance experience.
- 2.21 In conclusion, it is clear that the University enhances both its programme offer and existing programmes through annual monitoring and, notwithstanding the comments above, periodic review activity. The Audit Panel heard that enhancement to systems is an evolving process, occurring as needs arise. The Audit Panel was provided with examples of how changes to processes were made as demand dictated, and change occurred quickly to accommodate that demand.

Systemic review and planned change is lacking, rather organic processes are relied on. The University indicated to the Audit Panel that reviews of practice ‘may be based on experience/latest reports, new initiatives or imperatives, or as developments in higher education emerge’. This stance indicates a responsive and hence swift, rather than proactive and hence measured approach. The recommendation made in relation to this criterion should enable the university to optimize opportunity for enhancement that may not otherwise be identified in responding to immediate needs.

3. REVIEW AND ENHANCEMENT OF TEACHING AND LEARNING

- 3.1 HKUST states that its T&L Strategy establishes the framework for the review and enhancement of teaching, learning and assessment. The framework covers five dimensions, namely (1) Tri-model education framework, (2) OBE, (3) eLearning, (4) Internationalisation, and (5) Teaching Innovation and Resources. Online teaching and learning as well as assessment practices implemented during the pandemic have been embedded into curriculum design policies from 2021/22, and two policy papers, namely Policy for Undergraduate Courses to be Delivered in Real-Time Online or Mixed-mode Format, and Policy for TPg Programmes and PG Courses to be Delivered in Synchronous Online Mode have been developed and approved by the Senate for adoption across the University.
- 3.2 HKUST strives to be an employer of choice and seeks to use market data analysis to maintain competitive salaries for academic and non-academic staff. The CEI runs New Faculty Orientation and University Teaching and Learning workshops to inform new staff of the University’s teaching and learning policies and best practices. The University has introduced the award of the titles of Assistant and Associate Professor of [Subject] Education to recognise high performers. These titles are given to individual faculty who are dedicated to the educational experience of the students and collectively they form a strong core group of teaching-oriented staff, with less interruption of research activity. It has developed KPIs to monitor external engagement of programmes and staff. The Learning and Development (L&D) Team of the Human Resources Office (HRO) drives L&D initiatives, and online resources are used to facilitate the continuous self-development of staff.
- 3.3 HKUST operates an annual Equipment Competition which allows faculty/academic units to obtain equipment to address urgent teaching or research needs. The Library reviews the adequacy of its learning environment and resources through users’ feedback and other measures including regular data collection and trend analysis. The CEI is the University’s major facilitator/provider of complementary learning environments, and teaching and learning innovation projects encourage faculty/teaching staff to initiate and experiment with innovative ideas in their teaching.

- 3.4 Research supervision is conducted by Schools and the AIS in accordance with the Code of Practice for Research Postgraduate (RPg) Thesis Supervision. Students submit annual reviews of their study progress, and feedback is evaluated and shared with Departments to enhance research supervision. Taught postgraduate programmes are peer-reviewed every five years.
- 3.5 The Audit Panel found policies and/or guidelines are in place to guide T&L practice. Annual Reports produced by units document self-reflection on T&L dimensions and are monitored by the Senate CTLQ. CTLQ Annual Reports submitted to the Senate include good practices identified in the School/AIS Annual Reports, and a repository of which, by year and by category, is available to all faculty/staff via the AQM. The Audit Panel suggests that the University could benefit further if measures are implemented to enable more coordinated dissemination of good T&L practices for continuous enhancement. While the self-reflection as documented in the Annual Reports includes T&L dimensions, internal periodic review processes that involve parties external to the units may not cover T&L matters in an explicit manner. The Audit Panel suggests that programme review should cover the domain of T&L explicitly and is a development that the University may wish to address when considering the recommended action made in paragraph 2.18.
- 3.6 Statistics show that teachers' participation in the University T&L sessions is low. The professional development courses designed for new teachers and training on research supervision are recommended but not mandatory, and no specific timeline is specified for new teachers to complete the relevant courses. The panel noted that the University has taken steps to communicate plans to bolster professional development, including the introduction of policies for the professional development of new teachers. While the Audit Panel observed evidence that new teachers follow the University's recommendation, it is suggested that the University may wish to articulate a clear set of policies on new teachers' professional development requirements.
- 3.7 Notwithstanding the recommendation made in paragraph 1.18, the Audit Panel found evidence that HKUST has updated its e-Learning Strategies regularly over the last eight years (2015, 2017, 2019, 2021). The University is keen to use technologies to enhance students' learning experiences and an extensive portfolio of training courses are organised by the CEI to meet the long-term adaptation of virtual teaching and learning as an integral part of the University's educational programmes. The Audit Panel considers **the steps taken to regularly develop eLearning Strategies and Policies ensure that the University is well-placed to adapt to changing circumstances and to capitalise on current developments in digital learning and is a feature of good practice.**
- 3.8 The aforementioned two policies on online learning enable teachers to adopt non-face-to-face delivery formats upon approval, and senior management and

programme managers of HKUST emphasised that face-to-face delivery is the default delivery mode for courses and programmes. The Audit Panel was satisfied that this stance was being followed and did not see a proliferation of the use of online courses or synchronous online teaching, which may have the potential for a reduction of face-to-face contact hours. The management of HKUST is aware of the various risks of the development of courses to be delivered in real-time online and mixed-mode format and has stated some possible risks in policies to draw this to the attention of program/course planners and developers. The Audit Panel suggests the University may wish to make risk management a more explicit component in its e-Learning policy and to mitigate the possible risks at the central level in its future development.

- 3.9 The Audit Panel noted that HKUST had introduced policies to recognise good teaching. The University introduced the Teaching-track Faculty (TTF) in 2016 and the Assistant/Associate Professor of [Subject] Education titles to recognise good teaching in 2018. There is a total of 12 Assistant Professors of [Subject] Education and the 28 Associate Professors of [Subject] Education from the five Schools/AIS. Teaching staff provided examples from their experience that demonstrated to the Audit Panel that the scheme has been implemented in a way that recognises and encourages good teaching, and that teaching-track faculty have been actively involved in supporting teaching enhancement activities. The Audit Panel considers **the establishment of education-based titles of Assistant and Associate Professor that recognises and promotes good teaching practice is a feature of good practice.**
- 3.10 Overall, the Audit Panel concluded that the University T&L Strategy establishes the framework for the review and enhancement of teaching, learning and assessment. The Audit Panel found that policies and/or guidelines are in place and examples of good practice and enhancement are evident. Annual reports produced by units include self-reflection on teaching and learning and are monitored by the Senate CTLQ. The University has updated its e-Learning Strategies and Policies for Online Delivery from time to time and has developed regulations and pedagogical support for the implementation of these modes of delivery. The Audit Panel noted that the University had updated its policy to recognise good teaching by establishing the education-based Assistant and Associate Professor courtesy title.

4. REVIEW AND ENHANCEMENT OF STUDENT LEARNING ASSESSMENT

- 4.1 The formal regulations concerning assessment are bound in the overall academic regulations for undergraduate and postgraduate study. Explanatory codification is in the 'Assessment of Students' section of the revised AQM, which is part guide and part regulatory. This section introduces outcome-based assessment and learning outcomes, specifies the role of assessment in demonstrating academic standards, and specifies the roles of faculty members in various assessment-

related tasks. It also notes that ‘the primary responsibility for maintaining internationally comparable academic standards rests with the faculty and teaching staff,’ though faculty members only recommend grades that are approved at Head of Department level.

- 4.2 The ‘Assessment of Students’ section has two new sub-sections, arising as a result of the CSR prepared for this Audit: ‘Good (and Poor) Practices in Student Assessment;’ and ‘Assessment Schemes’. The short ‘Good (and Poor) Practices in Student Assessment’ conveys tips to faculty members on how to manage and organise assessments, reminding them, among other items, not to use norm-referencing and to be mindful of grade distributions to prevent grade inflation.
- 4.3 The website of the CEI provides a wealth of information to teachers on the advantages and disadvantages of at least 22 different assessment tools, on how to make assessments authentic, on the role of feedback to students, and on how to implement OBE.
- 4.4 Undergraduate course grade distributions are monitored annually by the CUS. For postgraduate taught programmes there is no similar scrutiny, but course grade distributions are sent by the Associate Provost (T&L) to the Deans and to relevant Department/Division Heads to enable them to view their comparative performance. Revised Guidelines for the Use of Undergraduate Course Grade Distribution Bands were approved in 2020, reflecting HKUST’s experience with course grading and criterion-referenced assessment since adopting OBE. These guidelines also counsel teachers not to use norm-referencing in assessment.
- 4.5 The SER noted that ‘the official grading policy is criterion referencing in all courses’. Students met by the Audit Panel were clear in their perception that while some of their work was assessed by criterion-referencing (OBE), some were still assessed using norm-referencing, such that their grades were dependent on the performance of other students. Further, in some cases the grading method (criterion-referencing or norm-referencing) was not transparent to students, but they could find out which applied by speaking to their teachers. Teaching staff confirmed that norm-referencing occurred for some courses, and in some parts of the University was the standard approach. Teaching staff explained to the Audit Panel that grade guideline bands are used to assist with the stability of a course’s grades profile. For example, if grading were skewed such that many A grades were awarded, marks would not be changed, but this would prompt a discussion and potential revision to the grading criteria and assessment tools the next time the course is delivered. However, advice from the Academic Registry on course grade distribution bands indicates that, ‘where undergraduate course grades fall outside the above guideline bands, faculty and instructors assigning grades should consider moderating their marking/grades, where appropriate, to assure themselves that the grades are academically justified, and should be ready to explain their grading decisions’. which the Audit Panel interpreted could be an instruction to engage in norm-referencing.

- 4.6 Some senior staff indicated that the roll-out of OBE was complete, aided by the production of guidelines to teaching staff (see above) and that there was no norm-referencing. This indicates that there is some disparity between assessment practice and senior staff understanding.
- 4.7 The Audit Panel considered that the University has made much progress in implementing OBE over the past decade but, given that at least pockets of norm-referencing practice persist within the University, despite ample guidance being available to teachers, there is potential for the grade awarded to some students to be dependent on individual grading practices adopted by individual teachers. The Audit Panel found it difficult to gauge the extent of this issue and heard that the University is unaware of the extent and has no current means to detect it except through informal channels and when the issue is raised by students. However, there are tentative plans to address the issue by asking teachers to submit both marks and grades. The Audit Panel **recommends the University address variability in marking practice and ensure there is adherence to its own guidance on criterion-referencing.**
- 4.8 The ‘Grading of Courses’ in the ‘Assessment of Students’ section of the AQM on post-assessment moderation, except as indicated in paragraph 4.5 above states that Academic Registry also provides advice regarding the grading of courses and as part of that advice refers to ‘grade moderation’ as an annual review, including modification if deemed necessary, of grade distributions in relation to previous distributions for that course. Senior staff and students met by the Audit Panel confirmed that post-assessment moderation by sampling assessed work to check that grading is appropriate does not occur. However, in some departments there is double marking of capstone projects. The Audit Panel **recommends the University introduce a post-assessment moderation system including the sampling of student work to confirm, or otherwise, that academic standards are consistently applied.**
- 4.9 The processes to be followed when students are suspected of breaching academic integrity are contained in the Regulations for Student Conduct and Academic Integrity. Students met by the Audit Panel were aware of the University’s rules about academic integrity, including rules concerning the use of artificial intelligence tools, in some cases drawn to their attention on assessment briefs, but were much less sure about the penalties for breaking those rules. Cases are generally dealt with by the Head of Department/Division, but, with the exception of very serious cases, penalties are not standardised in relation to offence and thresholds for triggering referral to the School/AIS Dean are not explicit. As a result, there is scope for variation in practice. Very serious cases, such as grade tampering or gaining academic advantage through theft, may be dealt with by the Senate Student Disciplinary Committee. This Committee publicises some of its cases as a deterrent to students.

- 4.10 Since 2020/21, there have been 215 detected cases of breaches of academic integrity, the great majority of which were dealt with at School level. Given the size of the student population at the University, these numbers are not excessive. The nature of academic infringements is discussed at Associate Deans' meetings. Minutes of these meetings show that practices, particularly in relation to penalties, differed between schools/AIS, but that there was discussion about reaching common ground through informal, as opposed to stipulated, alignment of practices. Accordingly, there is scope for students who commit the same offence to be dealt with differently dependent on which school/AIS or department/division they are affiliated to. The minutes of Associate Deans' meetings show that while there is some noting of the patterns of infringements, institutional learning that leads to changes in practice is not evident. The Audit Panel **recommends the University revises promptly its approach to breaches of academic integrity by students by applying a common scheme for penalties, specifying under what circumstances cases are escalated to school level, and analysing patterns of infringements.**
- 4.11 Students can appeal grades informally and by written request to the Head of Department within two weeks of grade release. The Head will arrange for a review of the work within three weeks. If the student is not satisfied with the outcome of the review, a further appeal can be made within two weeks to the School/AIS Dean who will determine whether or not a further review is necessary and report the final outcome to the student. The 'Assessment of Students' section of the AQM strongly recommends that records are kept of this process but does not mandate this. Nonetheless, sanctions issued for all cases that the University deems 'serious' are kept on the student's individual record. Information about appeals processes is readily available in student handbooks.
- 4.12 The University supplied data on student appeals that showed, with the exception of one school in one semester, almost all are dealt with at department level and very few escalate to school level. However, the number of successful grade appeals since 2020/21 has ranged from 286 to 521 per semester. Each successful appeal requires a student both to detect an anomaly and to intervene, and as such the Audit Panel considered it likely that there were more instances of an inappropriate mark awarded that was not corrected because a student did not detect it or did not appeal it. There is scope for a tightening of assessment procedures to reduce the number of inappropriate assessment decisions made. The Audit Panel **recommends the University take steps to significantly reduce the number of inappropriate assessment decisions made and hence the number of appeals by students.** It was further noted that the University was unable to provide any evidence showing where it oversees the appeals process, and discusses and learns from appeal cases and statistics.
- 4.13 Information about assessment is made plain in the undergraduate student guide, the Handbook for Taught Postgraduate Studies and the Handbook for Research Postgraduate Studies. Students met by the Audit Panel confirmed that course

assessment plans and requirements were made available to them electronically and sometimes verbally at the start of each course, and that assessment criteria were explained to them.

- 4.14 The ‘Assessment of Students’ section of the AQM suggests it is good practice to provide feedback to students on their work within two weeks. Students were generally satisfied with the time taken to receive their grades and feedback on assessed work, but reported that the quality of feedback ranged from excellent, to, in some cases, no feedback received at all. The University does not have any formal requirements about how quickly marked work should be returned to students and faculty members reported that they work to generally two-to-three-week deadlines, but that these timeframes are set locally.
- 4.15 Change and revision to systems often arise internally and organically, as the following three examples show. In 2016, the CUS identified the need to re-evaluate the academic standard required for honours classification and accordingly established a Task Force on Reviewing Grade Averages & Degree Classification of Undergraduate Studies. The Task Force reported that while the standards were generally appropriate and equivalent to those at benchmark institutions, some fine-tuning was required following the introduction of the 4-year bachelor’s degree. Proposals for new rules to calculate graduation grade averages that are used for determining honours classification, and the adoption of a two-tier (course then programme) assessment board system were approved by the CUS and the Senate in 2018, but only after various rounds of consultation involving internal stakeholders including students. The CUS also reflected on grade inflation and proposed updated course grade guideline bands to counteract it, recognising that such action was only an interim measure since it did not address the underlying cause, which might, or might not be, related to the adoption of criterion-based assessments. The Senate asked the CUS to reflect further on the implications and rules associated with the revision and the CUS presented a more nuanced and complete set of proposals, which were approved by the Senate in 2020. The revisions included an expansion of the A grade band and a contraction of the C grade band. While the CUS considered that deviation in grading and grading practice was within acceptable levels, the revision allowed better alignment between course grade guideline bands and actual course grade distributions. Rules for the Conduct of Examinations, annexed to the Regulations for Academic Integrity, and the Declaration of Academic Integrity were enhanced in 2021 to cover online proctored examinations, as a response to the pandemic.
- 4.16 In conclusion, the Audit Panel was able to confirm that the formal regulations concerning assessment are bound to the overall academic regulations. Overall, there is a strong steer from the University in the adoption by faculty members of OBE. Sound practices are adopted in informing students about assessment in general and their specific assessment tasks, and in the timely return of their work with appropriate feedback. However, there is scope for the tightening of some

aspects of assessments including the development of post-moderation assessment systems, standardising practices in relation to infringements of academic integrity, increasing the reliability of its assessment decisions, and ensuring that OBE is fully deployed in assessment. Change and revision to the University's approach to student learning assessment are largely based on responding to needs as they arise. Enhancement of student learning assessment arises as deemed necessary. There is no formal schedule of review or point where student learning assessment as a whole or in part is taken stock of. The recommendations made in relation to this criterion are designed to enable the University to optimize opportunities for enhancement that might not otherwise have presented themselves had formal review arrangements been in place.

5. REVIEW AND ENHANCEMENT OF THE UNIVERSITY'S ARRANGEMENTS FOR SUPPORTING STUDENTS

- 5.1 HKUST is committed to providing both academic and non-academic support to students and has put in place a range of initiatives to ensure its smooth implementation. The DSTO together with academic units provide support for students' personal development. The Information System Office (ISO) has been developing application systems to enhance the quality of the learning environment by assisting units in managing and providing academic programmes and personal support/advice to students. Student induction, graduate attributes, the CCP competency framework, all underpin the personal, academic and professional development. The provision of support for academic development is delivered primarily through the academic programmes with the DSTO and School/AIS Advising Teams leading on personal and career support.
- 5.2 There are various student-oriented activities for incoming students. Student orientation is organised jointly by Schools, AIS, Departments/Divisions, and different sessions are organised for undergraduate, taught postgraduate, and research postgraduate students. Enrichment talks/tours/workshops (covering essential skills, personal growth, social networking) are organised by teaching support units. On-campus orientation days are organised by student societies for incoming students. The New Student Orientation website provides a 'Checklist' for students to identify important activities to kickstart student life.
- 5.3 Students' personal, academic and professional development are supported through student mentors and academic/supporting units. Senior students serving as peer mentors provide general support/advice, and DSTO and academic units provide supports for students' personal development. Undergraduate, taught postgraduate, and research postgraduate students can all join the various activities organised by DSTO. Competence building is through practical experiences, and 86.2% of non-first-year undergraduate students had taken up at least one internship in 2020/21. HKUST ENGAGE is a platform for tracking/managing student participation in co-curricular activities. It is noted that different sets of graduate attributes have been defined for undergraduate and

taught postgraduate programmes, and research postgraduate attributes are embedded within the document. The continuing developments in new technologies and evolving societal needs may bring about new competency requirements expected of graduates, and as such it is suggested that HKUST will want to keep the attributes for undergraduate and postgraduate programmes under review in addition to factors such as grade distribution and, honours guidelines for example.

- 5.4 HKUST offers a Peer Companion Training Programme which provides intensive gatekeeping and caring skills training with the intention of strengthening peer support for students. At the time of the audit visit, there were 139 members of the scheme in the roles of Senior Peer Companions and Peer Companions offering support services to their peers. The Audit Panel was informed that there is no mentorship programme for taught postgraduate students. Instead, an approach akin to a 'buddy' programme is in place. As a consequence of the restrictions caused by the COVID pandemic, an online chat system was put in place and Senior Peer Companions and Peer Companions offered their support through the chat system.
- 5.5 For undergraduate students, language enhancement (English) courses are incorporated into the CCP curriculum and benchmarked with IELTS band score. For research postgraduate students, there are mandatory research writing skill/English communication courses. The Audit Panel was informed that all levels of students can seek help on language support from the Centre for Language Education.
- 5.6 The Audit Panel learned that every new undergraduate student is assigned a faculty advisor. The faculty advisor is in a position to help identify issues early for those students who may require support. The use of a WhatsApp line for students to contact staff can also help those students who find direct, face-to-face communication difficult to voice out their needs. All students on exchange visits are managed through DSTO. For critical incident situations, there is a task force chaired by Vice-President for Administration and Business.
- 5.7 The UGC's Special Grant to Enhance the Support for Students with Special Educational Needs (Phase Three) has resulted in a number of initiatives being implemented to support such students. These include University-based awareness training and a digital case management system. A Special Education Needs support team provides specialised support to more than 260 students.
- 5.8 With the launching of mixed mode/online teaching and learning during the COVID pandemic, the University developed regulations and pedagogical support to ensure the effective implementation of online teaching and learning. A consultancy report was subsequently commissioned to evaluate the implementation of these initiatives from the perspective of all stakeholders. The survey identified an overall positive response from both staff and students. Staff

felt that learning outcomes were achieved and that there was a theme that staff had a sense of ‘pedagogical growth’. Students agreed that they understood how online approaches were to operate, were able to access learning resources and had a strong sense of satisfaction overall.

- 5.9 HKUST has a diverse student population from the Mainland, Macao and Taiwan as well as over 60 countries. Many non-local students participate in student group/association events. The Spark Global Program, largely run by local students under the Office of Global Learning, supports non-local students on local community engagements and services. The CEI also supports activities aimed at cultural diversity.
- 5.10 Students are members of the University Council, Senate, and Senate Committees; and represented on School/AIS Boards and other School/AIS/Departmental Committees. The Audit Panel heard from students that they were not provided with any training for their role on committees and that support for their role was informal. The Audit Panel suggests HKUST may wish to consider introducing an induction and support programme for student committee members, which may benefit not only the students concerned but may ensure that the University benefits from improved and more effective contributions from students attending committees.
- 5.11 End-of-programme exit surveys are conducted for undergraduate, taught postgraduate and research postgraduate students. The OADR executes student evaluation and assessment studies to collect and analyse students’ learning experiences for undergraduate and taught postgraduate programmes. The University has various guidelines, policies, and committees to support students studying at the University. Complaints involving sexual harassment are investigated in accordance with the University Policy on Sexual Harassment. Complaints involving undergraduate student grievances are handled by the Dean of Students. The channels for lodging appeals and complaints by postgraduate students are stipulated in the relevant Handbook for TPg Studies and Handbook for Research Postgraduate Studies, respectively. The Diversity and Equal Opportunities Committee, which was established in 2022, has responsibility for reviewing and making recommendations on the mechanisms and procedures for handling complaints and enquiries on harassment and discrimination.
- 5.12 The Career Centre provides various activities for career exploration, discovery and planning. Statistics on usage of the Centre for recent years demonstrate that the Centre is well used with the Careers pages of the website being accessed on average by around 700 000 unique views. The Career Development Programme attracts an average of 6 000 to 7 000 student participants a year and Career consultations average around 1 500 per year.
- 5.13 Overall, the Audit Panel concluded that the University has appropriate policies in place to drive the delivery of effective academic, personal and professional

support for students at all stages of their study. The University's policies and procedures are fit for purpose and the Audit Panel was assured of HKUST's commitment to providing an environment that is supportive of learning.

6. COLLECTION, ANALYSIS AND USAGE OF DATA

- 6.1 HKUST uses data, including academic KPIs in developing and reviewing strategic plans, to enhance course design, assessment, teaching provision and the student academic experience, and to monitor and improve student achievement. Data on student recruitment, retention, achievement of intended learning outcomes, completion, and employment are collected, analysed, and made available to inform decision-making processes at all levels of the University.
- 6.2 The creation and embedding of data strategies, policies, and implementation plans are the responsibility of the DGC. A Data Governance Policy defines the necessary organisational structures, rules, and guidelines for supporting secure and productive use of organisational data, regardless of the form in which it exists, for operational and analytical needs of the University. It is supported by a Data Privacy Policy, a Cybersecurity Policy, and a Data Classification Policy.
- 6.3 A Data Warehouse and Analytics Strategy defines a number of analytic dashboards, including a Student Dashboard that displays admissions, intake, student retention, attrition and graduation, grade distributions and other data.
- 6.4 The PAIR Portal is a platform of analytics reports, which enables vertical and horizontal trend analysis and informs planning and decision-making. The PAIR Portal also analyses the University's performance in sector-wide performance measures and institution-specific KPIs that inform the annual UAA and the triennial PEP.
- 6.5 Examples of ways in which the University uses data for strategic development are provided in the SER. These include the Strategic Plan, the annual budget, grade distributions and guidelines for honours, and key performance data collection to monitor the University's performance. A refresh of the CCP was a major institutional initiative that required in-depth analysis of programme and graduate survey data, and data from reviews of universities that had recently revised their own general education programmes, including Harvard and Princeton. Development of research strategies is informed by data, such as the Research Assessment Exercise results. The Central Research Facilities collect user-profile and equipment usage data to inform the funding model governing shared equipment facilities. Space usage data informs the level of support provided to the central research facilities, and success rates of external grant applications and total funding data determines the funding for equipment provided to the faculties.

- 6.6 The University's performance measures (PMs) are based on a standard set used across the sector in Hong Kong while the institutional-specific KPIs are developed to complement to the sector-wide PMs. The institutional PMs and KPIs are revised with the UAA, in agreement with the UGC. The senior management group regularly reviews institutional performance by reference to the KPIs.
- 6.7 Examples showing the use of PM and KPI data were provided by senior staff. These included the annual budgeting exercise that uses data in the UAA and the Common Data Collection format, the annual senior managers' retreat that provides an opportunity to review progress, priorities and direction of travel, and the strategies planning cycle.
- 6.8 KPIs from Domain 1 are used by the Provost's Office, the DSTO, and the Centre for Language Education, to understand the learning needs of students and the effectiveness of improvements to teaching quality. Data from Domain 4 is used to inform recruitment decisions and policies relating to teaching and learning.
- 6.9 The T&L Strategy and the e-Learning Strategy each have associated KPIs to evaluate progress towards the short- and long-term goals.
- 6.10 Benchmarks and external reference points are used at all levels within the University. The University's performance in teaching, learning, research and academic pursuits is benchmarked against international competitors. Metric data from various global university league tables, such as the Times Higher Education ranking, is used to benchmark against other universities and inform the development of policy and planning. Risk management at an institutional level is informed by benchmarking with both local and non-local institutions, to monitor how the external environment and internal activities might pose risks to its reputation.
- 6.11 External reference points are used with KPIs and performance measures to inform planning processes, periodic reviews of Schools/AIS, the programmes they deliver, and other types of decision-making. They are also used in the external accreditation or many programmes, and in the periodic review process of others, to benchmark their curricula, academic standards, and quality.
- 6.12 The University's Information Systems Strategy and Plan have been regularly updated since 2015; the current version runs until 2025. Each review and update has included input from key stakeholders. A separate Data Warehouse and Analytics Strategy directs the delivery of data-driven analytics for decision-making processes.
- 6.13 Appendix 2 of the CSR lists the various type of data collected and their use to inform course design, assessment, teaching provision and the student academic experience, together with examples. The Annual Reports on Teaching and

Learning Quality provide further examples of data-driven enhancements. The template for annual reporting notes that the data sets for Annual Reporting are available on the registry web pages and provides the relevant link. Data is provided for the review and development of course design, assessment, teaching provision and the student academic experience by the dashboards of the PAIR Portal.

- 6.14 Data on recruitment, retention, achievement of intended learning outcomes, completion and employment is used to monitor and improve student achievement. Several examples of the use of data in this way are presented throughout the CSR.
- 6.15 The OADR is responsible for collecting feedback through a number of surveys that include Student Feedback Questionnaires at the end of each course, an Intake Survey, a First Year Experience Survey, a Student Experience and Satisfaction Questionnaire for final year undergraduate students, and a Taught Postgraduate Programme Exit Survey. The survey data are analysed and used at all levels of the institution for monitoring and evaluating all aspects of teaching, learning and the student experience. Examples of the use of student and graduate survey data to drive change are provided in the CSR.
- 6.16 Student survey data are used in the academic reviews of teaching staff. When staff members submit their review information via the platform Faculty Online Report System, the system automatically loads the courses they taught and the relevant survey results for those courses.
- 6.17 Examples of the collection and analysis of data about the student experience, and responding appropriately, are provided in the CSR. Following a recommendation in the QAC second audit cycle, HKUST has developed a platform for tracking student participation in co-curricular activities. The platform, known as ENGAGE can be accessed by Schools, the AIS, departments, and other offices, for monitoring and improving the quality of the activities. Student engagement data analytics are accessible via the PAIR Portal.
- 6.18 Data are routinely used to monitor and improve the University's performance as part of the annual planning process. Academic data are used at management meetings, and at the Senate and its sub-committees, to facilitate evidence-based decision-making and planning. The Teaching and Learning Data Warehouse provides programme data particularly during the Annual Report on Teaching and Learning Quality exercise. The SER provides examples of data-driven enhancement at the School and AIS level extracted from recent Annual Reports of Teaching and Learning Quality. Further evidence for the use of data to inform programme development is found in the examples of external review documentation provided. Both academic and support service staff were able to confirm the use of data to monitor their performance.

- 6.19 Evidence of a data-driven approach to improvement is provided by the University's Information Systems Strategy and Plan, also by the Data Warehouse and Analytics Strategy, and the policies for Data Governance, Data Privacy, Cybersecurity Policy, and Data Classification.
- 6.20 The PAIR Portal provides data and analytics reports for monitoring, review and decision-making processes. The Audit Panel found evidence of the use of performance-related data at all levels of the University.
- 6.21 The Audit Panel was able to confirm that the University collects, analyses and uses data in its management of academic quality and standards and makes evidence-based decisions designed to enhance the quality of teaching and learning. The Data Governance Policy, owned by the DGC, defines the necessary organisational structure, rules, and guidelines for supporting secure and productive use of organisational data. Institutional data is collected and analysed by the OADR, and is made available through the PAIR Portal through a wide range of dashboards. The Audit Panel found examples of the use of data to inform decision making across the University, in processes that include from monitoring progress with strategic plans, utilisation of data to enhance course design and development, monitoring student achievement, and following graduate career destinations. Numerous examples of the use of data are provided in the CSR Report that accompanies the SER.

7. CONCLUSIONS

- 7.1 The University's processes for planning are underpinned by its vision, mission, and strategic objectives, assisted by the T&L Strategy and the AQM. While the University demonstrates central oversight in strategic planning, there is an opportunity to further enhance and strengthen its oversight in other areas, particularly in the academic management of courses and programmes that is largely devolved to school and department levels. The institutional teaching and learning strategy is operationalised through a portfolio of policies and processes, which are reviewed and revised in response to changes in the internal and external environments. The Audit Panel found relatively few examples of a planned, comprehensive approach to the improvement of institutional quality operations. There is evidence that the committees at school- and department-level are overseeing the academic management of programmes, and that they are evolving in response to changing circumstances. Benchmarking for setting and maintaining of academic standards takes place, where available, through external accreditation agencies. For subjects where this is not possible, benchmarking occurs during the periodic review process.
- 7.2 The University develops new programmes and combinations of programmes in line with its strategic drivers and with a strong focus on interdisciplinarity. The University has established policies and procedures for programme development, approval, monitoring and periodic review. In practice, these procedures generally

involve significant externality. Periodic review is a more variable exercise and, in some cases, external accreditation and the reports of accreditation bodies are used in lieu of internal periodic review. The University is recommended to standardise its approach to periodic review. Various changes have been made to the University's arrangements for programme development, approval, monitoring and review in recent times and are part of evolving systems, occurring as needs arise. A process of more systemic review and implementing planned change in a more proactive and rigorous manner may help the University to capitalise on opportunities for enhancement.

- 7.3 The framework for the review and enhancement of teaching, learning and assessment is established in the University T&L Strategy. Appropriate policies and/or guidelines are in place and examples of good practice and enhancements are available in various aspects of teaching and learning. Annual reports include self-reflection on teaching and learning and are monitored by the Senate CTLQ. Identified good practice is made available to all faculty/staff through the AQM. Periodic review of master's programmes covers topics such as curriculum, assessment and quality assurance, but various dimensions of teaching and learning could be considered more explicitly. A Framework for Virtual Teaching and Learning consultancy report was commissioned to support the development of virtual modes of delivery. The Audit Panel noted that the University has updated its policy to recognise good teaching by establishing the education-based Assistant and Associate Professor titles.
- 7.4 Overall, there is a strong steer from the University in the adoption of OBE by faculty members. Sound practices are adopted in informing students about assessment in general and their specific assessment tasks, and in the timely return of their work with appropriate feedback. However, there is scope for the tightening of some aspects of assessment including the development of post-moderation assessment systems, standardising practices in relation to infringements of academic integrity, increasing the reliability of its assessment decisions, and ensuring that OBE is fully deployed in assessment. Change and revision to the University's approach to student learning assessment are largely reactive. Formal regulations concerning assessment are bound to the overall academic regulations. These are used to specify practices in the AQM.
- 7.5 The University is active in providing both academic and non-academic support to students. For undergraduate students, language enhancement (English) courses are incorporated into the CCP curriculum and are benchmarked with IELTS band scores. For research postgraduate students, there are mandatory research writing skills and English communication courses. In general, all levels of students can seek help from the Centre for Language Education. Mechanisms for handling student complaints and conflicts between research postgraduate students and their supervisors are available. The assignment of faculty advisors for every new undergraduate student assists in the early identification of arising issues. The DSTO and academic units provide support for students' personal

development. All students can join activities organised by DSTO. The CEI also supports activities aimed at cultural diversity. Students are represented in the membership of University and School level committees; however, student committee members would benefit from specific preparation for their roles.

- 7.6 A Data Governance Policy, owned by the DGC, defines the necessary organisational structure, rules, and guidelines for supporting secure and productive use of organisational data. Institutional data is collected and analysed by the OADR, and is made available through the PAIR Portal through a wide range of dashboards. Numerous examples of data being used to inform decision-making across the University were evident. These include processes such as monitoring progress with strategic plans, utilisation of data to enhance the design and development of programmes, monitoring student achievement, and following graduate career destinations.

APPENDIX A: THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

[Information provided by the University]

History

The driving force for the establishment of The Hong Kong University of Science and Technology (HKUST) was a belief of the founders that Hong Kong needed a university that could propel it towards a knowledge-based economy. HKUST set out therefore to provide the entrepreneurs, scientists, engineers and global business managers to achieve that goal. The University was opened in 1991. The first intake of students enrolled in October 1991 at the current over 60-hectare location in Clear Water Bay.

In 2018, HKUST signed a tripartite agreement with the Guangzhou Municipal Government and Guangzhou University, to establish jointly a new campus in Nansha, The Hong Kong University of Science and Technology (Guangzhou) (HKUST(GZ)). Formally opened in September 2022, HKUST(GZ) realizes the University's ambition to transform education for the future, with its cross-disciplinary academic structure designed to complement the well-established disciplinary foundation at the Clear Water Bay campus.

Vision and Mission

The University Ordinance sets out the University's core purposes:

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 to assist in the economic and social development of Hong Kong.

In 2000, the University Council adopted a 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*

Role Statement

HKUST:

- (a) offers a range of programmes leading to the award of first degrees and postgraduate qualifications particularly in Science, Technology, Engineering, Management and Business Studies;
- (b) offers programmes in Humanities and Social Science only at a level sufficient to provide intellectual breadth, contextual background and communication skills to an otherwise scientific or technological curriculum, and limited postgraduate work;
- (c) incorporates professional schools, particularly in the fields of Science, Technology, Engineering and Business;
- (d) pursues the delivery of teaching at an internationally competitive level in all the taught programmes that it offers;
- (e) offers research postgraduate programmes for a significant number of students in selected subject areas;
- (f) aims at being internationally competitive in its areas of research strength;
- (g) assists the economic and social development of Hong Kong by nurturing the scientific, technological, and entrepreneurial talents who will lead the transformation of traditional industries and fuel the growth of new high-value-added industries for the region;
- (h) pursues actively deep collaboration in its areas of strength with other higher education institutions in Hong Kong or the region or more widely so as to enhance the Hong Kong higher education system;
- (i) encourages academic staff to be engaged in public service, consultancy and collaborative work with the private sector in areas where they have special expertise, as part of the institution's general collaboration with government, business and industry; and
- (j) manages in the most effective and efficient way the public and private resources bestowed upon the institution, employing collaboration whenever it is of value.

Governance and Management

The University structure is 'bi-cameral': authority for administrative and financial matters rests with the University Council, and the University Senate acts as the supreme academic body. While the Council maintains an overview of the business of the University, including approval of budgets, the management of the University is delegated to the Administration, under the President. The President acts on the advice of the Provost, Vice Presidents, Associate Provosts, and the University Administrative Committee.

The University Senate maintains active oversight of the curriculum, academic standards and educational quality. Key Senate committees include the Committee on Undergraduate Studies and the Committee on Postgraduate Studies. The Senate Committee on Teaching and Learning Quality has particular responsibility for the quality assurance of educational programmes.

Academic Organisation and Programmes of Study

Four Schools constitute the academic core of the University, offering undergraduate, taught postgraduate and research postgraduate programmes and courses through discipline-based Departments/Divisions: five in Science, seven in Engineering, six in Business and Management; three in Humanities and Social Sciences, including the Centre for Language Education; and three under the Academy of Interdisciplinary Studies¹, which offers cross-School programmes.

Building on this core, the HKUST Jockey Club Institute for Advanced Study was established in 2006, moving into its own building in 2013.

Staff and Student Numbers

As of September 2022, the University had 10 478 undergraduate and 2 799 postgraduate students in UGC-funded programmes. Enrolments in self-financed programmes accounted for a further 4 304 students. The teaching staff comprises 727 regular and 18 visiting and short-term staff to give a total of 745. All teaching staff members have doctorates.

Revenue

Consolidated income for the year ending 30 June 2022 was HK\$4,988 million of which HK\$3,033 million (61%) came from government subvention and HK\$1,519 million (30%) from tuition, programmes and other fees.

¹ Renamed from the Interdisciplinary Programs Office with effect from 1 July 2023.

APPENDIX B: INSTITUTIONAL RESPONSE TO THE AUDIT FINDINGS

Introduction

The Hong Kong University of Science and Technology (HKUST) extends its thanks to the Audit Panel Chair and members, to the Audit Coordinator and to the Quality Assurance Council (QAC) Secretariat for their efforts in conducting the virtual audit.

With students at the heart of the University's mission and community, it is pleasing to note that the Panel 'was able to confirm that the University is active in providing both academic and non-academic support to students' and 'concluded that the University has appropriate policies in place to drive the delivery of effective academic, personal and professional support for students at all stages of their study' and 'was assured of HKUST's commitment to providing an environment that is supportive of learning'.

Recognising that the University had provided substantial feedback on both the tone and content of the draft report, HKUST is grateful to the Panel for receiving the feedback in the spirit intended, as part of a collegial and collaborative process, and for taking on board some of the points raised in the final Audit Report, in which it is noted that there remains a great deal of repetition.

The University is pleased to note that the audit outcomes amount to a recommendation to further strengthen certain areas - in particular a scheduled and periodic review of all QA-related policies, and the approach to academic program review - which are already well established and fit-for-purpose. Within the University's existing culture of continuous improvement, it will explore any such enhancements as will add value to the institution.

As an international university that has diversity as a key strategic goal, HKUST was aware that the perspectives and observations of Panel members from a different Quality Assurance environment outside of Hong Kong would inevitably be influenced and informed by that background and that there was the potential for miscommunication and misunderstandings to arise, given the very different nature of the Hong Kong Higher Education sector, as well as the unique characteristics of HKUST.

Recommendations

There are, in essence, two key recommendations contained in the Audit Report. The first is to strengthen the approach to centralized Quality mechanisms and activities. Within the context of an established and comprehensive structure for quality control that has served the University's mission and success, and in the absence of any specific and critical issues having been identified, the most appropriate approach for HKUST to address this recommendation will be considered for the forthcoming Action Plan.

The second recommendation is to strengthen some aspects of the approach to assessment and this will also be explored in our Action Plan.

Good Practices

The University also thanks the Panel for recognising features of HKUST good practice, including ‘strong action planning’, ‘strong externality’ and ‘a strong focus on interdisciplinarity’.

It is noted that the Panel, ‘considers the steps taken to regularly develop eLearning Strategies and Policies ensure that the University is well-placed to adapt to changing circumstances and to capitalise on current developments in digital learning and is a feature of good practice’.

So too the panel ‘considers the establishment of education-based titles of Assistant and Associate Professor that recognises and promotes good teaching practice is a feature of good practice’.

Exploring novel pedagogies and technologies, and recognising, promoting and celebrating excellence in teaching is one of the key characteristics of the University and it is appreciated that this is recognised in the Audit Report.

Conclusion

The recommendations and suggestions made within the Final Report will be explored in the creation of an Action Plan that aligns with the requirements of the QAC’s audit process and with the needs of the University, in order to meet the goal of upholding and further strengthening the quality of our academic offerings and institutional practices.

APPENDIX C: ABBREVIATIONS AND ACRONYMS

| | |
|-----------|--|
| AA | Academic Advising |
| AIS | Academy of Interdisciplinary Studies |
| AQM | Academic Quality Manual |
| CCP | Common Core Programme |
| CEI | Centre for Education Innovation |
| CSR | Critical Self Review |
| CTLQ | Committee on Teaching and Learning Quality |
| CUS | Committee on Undergraduate Studies |
| DGC | Data Governance Committee |
| DSTO | Dean of Students' Office |
| FYTGS | Fok Ying Tung Graduate School |
| HKQF | Hong Kong Qualifications Framework |
| HKUST | The Hong Kong University of Science and Technology |
| HKUST(GZ) | The Hong Kong University of Science and Technology (Guangzhou) |
| IPO | Interdisciplinary Programs Office |
| JUPAS | Joint University Programmes Admissions System |
| KPIs | Key Performance Indicators |
| L&D | Learning and Development |
| OBE | Outcome-based Education |
| OIDR | Office of Institutional Data and Research |
| PAIR | Performance Analytics, Intelligence, and Reporting |
| PAS | Postgraduate Admissions Sub-Committee |
| PEP | Planning Exercise Proposal |
| PG | Postgraduate |
| QAC | Quality Assurance Council |
| RPg | Research Postgraduate |
| SBM | School of Business and Management |
| SENG | School of Engineering |
| SER | Self-Evaluation Report |
| SHSS | School of Humanities and Social Science |
| SSCI | School of Science |
| T&L | Teaching and Learning |
| TPg | Taught Postgraduate |
| UAA | University Accountability Agreement |
| UAS | Undergraduate Admissions Sub-Committee |
| UGC | University Grants Committee |
| URAO | Undergraduate Recruitment and Admission Offices |

APPENDIX D: HKUST AUDIT PANEL

The Audit Panel comprised the following:

Professor Jeremy BRADSHAW (Panel Chair)
Emeritus Professor, University of Bath

Professor Mark DAVIES
Emeritus Professor, University of Sunderland

Professor Kwok Yiu LI
Associate Dean (SGS), Chow Yei Ching School of Graduate Studies; Professor of
Department of Materials Science and Engineering, City University of Hong Kong

Professor Isabella Wai Yin POON
Pro-Vice-Chancellor/Vice-President; Wei Lun Professor of Statistics, The Chinese
University of Hong Kong

Audit Coordinator

Mr Alan WEALE
QAC Secretariat

APPENDIX E: QAC'S MISSION, TERMS OF REFERENCE AND MEMBERSHIP

The Quality Assurance Council (QAC) was formally established in April 2007 as a semi-autonomous non-statutory body under the aegis of the University Grants Committee (UGC) of the Hong Kong Special Administrative Region.

Mission

The QAC's mission is:

- (a) To assure that the quality of educational experience in all programmes at the levels of sub-degree, first degree and above (however funded) offered in UGC-funded universities is sustained and improved, and is at an internationally competitive level; and
- (b) To encourage universities to excel in this area of activity.

Terms of Reference

The QAC has the following terms of reference:

- (a) To advise the UGC on quality assurance matters in the higher education sector in Hong Kong and other related matters as requested by the Committee;
- (b) To conduct audits and other reviews as requested by the UGC, and report on the quality assurance mechanisms and quality of the offerings of universities;
- (c) To promote quality assurance in the higher education sector in Hong Kong; and
- (d) To facilitate the development and dissemination of good practices in quality assurance in higher education.

Membership (as at February 2024)

| | |
|-------------------------------|---|
| Professor Jan THOMAS (Chair) | Vice-Chancellor, Massey University |
| Professor Simon BATES | Vice Provost and Associate Vice President, Teaching and Learning, The University of British Columbia |
| Dr Benjamin CHAN Wai-kai, MH | Chief Principal, Hong Kong Baptist University Affiliated School Wong Kam Fai Secondary and Primary School |
| Professor Jimmy FUNG Chi-hung | Associate Provost (Teaching & Learning), The Hong Kong University of Science and Technology |
| Professor Sir Chris HUSBANDS | Former Vice-Chancellor, Sheffield Hallam University |
| Professor Julie LI Juan | Associate Vice-President (Mainland Strategy), City University of Hong Kong |
| Professor Marilee LUDVIK | Associate Provost and Director, Office of Institutional Effectiveness, Loyola University Chicago |
| Ms Phoebe TSE Siu-ling | General Manager, Commercial Banking Department, Bank of China (Hong Kong) Limited |
| Dr Carrie WILLIS, SBS, JP | Former Chairperson, Committee on Professional Development of Teachers and Principals |

Ex-officio Member

Professor James TANG Tuck-hong Secretary-General, UGC

Secretary

Mr Louis LEUNG Deputy Secretary-General (1), UGC