



香港學術及職業資歷評審局
Hong Kong Council for Accreditation of
Academic & Vocational Qualifications

CONFIDENTIAL

ACCREDITATION REPORT

**TECHNOLOGICAL AND HIGHER EDUCATION INSTITUTE
OF HONG KONG,
VOCATIONAL TRAINING COUNCIL**

LEARNING PROGRAMME RE-ACCREDITATION

**BACHELOR OF SCIENCE (HONOURS) IN INFORMATION
AND COMMUNICATIONS TECHNOLOGY**

AND

BACHELOR OF SCIENCE (HONOURS) IN SURVEYING

JUNE 2021

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1. TERMS OF REFERENCE

(A) Terms of Reference of the Exercise

The terms of reference of the exercise are as follows:

- (a) To conduct an accreditation test as provided for in the AAVQO to determine whether the programmes of Technological and Higher Education Institute of Hong Kong, Vocational Training Council (the Operator) (with specifications under (B)) meet the stated objectives and QF standards and can continue to be offered as accredited programmes; and
- (b) To issue to the Operator an accreditation report setting out the results of the determination in relation to (a) by HKCAAVQ.

(B) Specifications of the programmes seeking accreditation status

Programme title (English and Chinese)	Award title on exit (English and Chinese)	Mode of study	Programme length	Major(s) leading to distinctive awards, if any	Claimed QF level
Bachelor of Science (Honours) in Information and Communications Technology 資訊及通訊科技（榮譽）理學士	Bachelor of Science (Honours) in Information and Communications Technology 資訊及通訊科技（榮譽）理學士	Full-time	4 years	N/A	5
		*Part-time	4 years		
	^Higher Diploma in Information and Communications Technology 資訊及通訊科技高級文憑	Full-time	2.5 years	N/A	4

Bachelor of Science (Honours) in Surveying 測量學（榮譽）理學士	Bachelor of Science (Honours) in Surveying 測量學（榮譽）理學士	Full-time	4 years	N/A	5
	^Higher Diploma in Surveying 測量學高級文憑	Full-time	2.5 years	N/A	4

^ Intermediate exit award

+ Year 3 entry arrangement only

2. HKCAAVQ'S DETERMINATION

2.1 The Programmes of Bachelor of Science (Honours) in Information and Communications Technology (BSc-ICT) and Bachelor of Science (Honours) in Surveying (BSc-SUR) meet the stated objectives and QF standard at Level 5 and can continue to be offered as accredited programmes with a validity period of five years.

2.2 HKCAAVQ has determined that the Programme of BSc-ICT should keep the existing programme title to reflect its current programme contents appropriately. The title of qualification (exit award) for BSc-ICT; with its intermediate exit award remain unchanged.

2.3 Validity Period

The validity period will commence on the date specified below. Operators may apply to HKCAAVQ to vary the commencement date of the validity period. Applications will be considered on a case-by-case basis.

2.4 The determinations on the Programmes are specified as follows:

Name of Operator(s)	Technological and Higher Education Institute of Hong Kong, Vocational Training Council 職業訓練局 - 香港高等教育科技學院	
Name of Award Granting Body	Vocational Training Council 職業訓練局	
Title of Learning Programme	Bachelor of Science (Honours) in Information and Communications Technology 資訊及通訊科技（榮譽）理學士	Bachelor of Science (Honours) in Surveying 測量學（榮譽）理學士
Title of Qualification(s) [Exit Award(s)]	Bachelor of Science (Honours) in Information and Communications Technology 資訊及通訊科技（榮譽）理學士	Bachelor of Science (Honours) in Surveying 測量學（榮譽）理學士
Primary Area of Study and Training	A04 Computer Science and Information Technology	A01 Architecture and Town Planning
Sub-area (Primary Area of Study and Training)	A0401 Computer Science and Information Technology	A0101 Architecture, Construction and Town Planning
Industry	B12 Information and Communications Technology	N/A
Branch	B1201 Communications and Information Services B1203 Software Products and Software Services	N/A
QF Level	Level 5	
QF Credits	554	

Mode(s) of Delivery and Programme Length	Full-time, 4 years Part-time, 4 years (Year-5 Entry to the 8-year part-time Programme)	Full-time, 4 years
Intermediate Exit Award(s)	Title of Qualification: Higher Diploma in Information and Communications Technology 資訊及通訊科技高級文憑	Title of Qualification: Higher Diploma in Surveying 測量學高級文憑
QF Level	Level 4	
QF Credits	315	
Attainment	Completion of 2.5 years in full-time mode	
Start Date of Validity Period	1 September 2021	
End Date of Validity Period	31 August 2026	
Number of Enrolment(s)	One enrolment per year	
Maximum Number of New Students	Full-time, Year-1 entry: 66 per year Full-time, Year-3 entry: 66 per year Part-time, Year-5 entry: 30 per year	Full-time, Year-1 entry: 99 per year Full-time, Year-3 entry: 66 per year
Teaching / Training Venue(s)	Technological and Higher Education Institute of Hong Kong (Chai Wan Campus) 133 Shing Tai Road, Chai Wan, Hong Kong Technological and Higher Education Institute of Hong Kong (Tsing Yi Campus) 20A Tsing Yi Road, Tsing Yi Island, New Territories, Hong Kong	

2.5 Recommendations

HKCAAVQ offers the following recommendations for continuous improvement of the Programmes.

BSc-ICT and BSc-SUR

- 2.5.1 The BSc-ICT and BSc-SUR programmes are recommended to reconsider their niche in the market and target students before developing a coherent and effective strategy, including marketing and student support services, to ensure long-term sustainability and growth for the programmes. *(Paragraph 4.2.4)*
- 2.5.2 The BSc-ICT and BSc-SUR programmes are recommended to develop a clear structure and set of guidelines on the employment of part-time teaching staff to ensure that every module is presented in a coherent and coordinated manner and that students have fair and reasonable access to a responsible staff member for each module. *(Paragraph 4.5.3)*
- 2.5.3 The BSc-ICT and BSc-SUR programmes are recommended to review the appointment process for external examiners to ensure that they have appropriate experience and qualifications for the areas they are examining. The Operator should also review the processes undertaken by the external examiners to ensure that all aspects of the assessment are adequately reviewed. *(Paragraph 4.4.11)*
- 2.5.4 The BSc-ICT and BSc-SUR are recommended to put more focus on soft skill training including presentation and interpersonal skills which are of major importance to employers. *(Paragraph 4.1.20)*

BSc-ICT

- 2.5.5 The BSc-ICT is recommended to undertake a thorough review of all recommended textbooks and reading to ensure the currency and appropriateness of the reference texts and teaching materials. *(Paragraph 4.4.4)*
- 2.5.6 The BSc-ICT is recommended to review the currency of the Programme: *(Paragraph 4.3.8)*
 - a) to include contemporary topics in their teaching content and to regularly introduce updated concepts and daily examples on the emerging technologies, such as the Internet of Things (IoT),

Smart City, cyber security, etc. so that students are acquainted with the trends of the industry;

- b) to review relevant modules, particularly in relation to web design, app design, and mobile computing; and
- c) to restructure modules such as *Multimedia Websites Design and Practices*, *Web Applications Development and Mobile Applications Development*, *Modern Web Technology Development* to better model current practices.

2.5.7 The BSc-ICT is recommended to increase the level of staff development (including attendance at appropriate conferences) and implement a staff recruitment strategy to ensure that the staff, including part-time staff, maintain knowledge of their disciplines and that the staffing complement can adequately contribute to the development of new and innovative programmes. (*Paragraph 4.5.5*)

2.5.8 The BSc-ICT is recommended to stay close to the industry by establishing a platform in connection with stakeholders of the industry which should meet at least twice a year to solicit input and advice on the curriculum and regular feedback on the performance of graduates. (*Paragraph 4.3.9*)

BSc-SUR

2.5.9 BSc-SUR is recommended to review the diversity and breadth of the Programme, given that most graduates of this Programme appear to work in the fields of QS and BS. This should not lead to reduced multi-disciplinary experience for students. (*Paragraph 4.3.18*)

2.6 HKCAAVQ will subsequently satisfy itself whether the Operator remains competent to achieve the relevant objectives and the Programmes continue to meet the standard to achieve the relevant objectives as claimed by the Operator by reference to, amongst other things, the Operator's fulfilment of any conditions and compliance with any restrictions stipulated in this Accreditation Report. To avoid doubt, maintenance of accreditation status is subject to fulfilment of any condition and compliance with any restriction stipulated in this Accreditation Report.

3. INTRODUCTION

- 3.1 The Technological and Higher Education Institute of Hong Kong (the Institute or THEi hereafter), set up by Vocational Training Council (VTC). THEi was gained Institutional Review status in September 2012. In 2020/21, it offers 21 HKCAAVQ accredited degrees covering a wide range of academic and professional disciplines.
- 3.2 The two programmes under re-accreditation in this exercise, namely, Bachelor of Science (Honours) in Information and Communications Technology programme (BSc-ICT) and The Bachelor of Science (Honours) in Surveying programme (BSc-SUR). Both Programmes were successfully accredited by HKCAAVQ in 2016 with a validity period of five years.
- 3.3 BSc-ICT was managed and operated under the Faculty of Science and Technology (FST) when it was first launched in 2016/17. It has come under the Faculty of Design and Environment (FDE) management since the AY 2018/19.
- 3.4 BSc-SUR was first offered in AY 2016/17, jointly managed by the FDE and FST, and came under the umbrella of FDE from the AY 2018/19 onwards.
- 3.5 THEi commissioned HKCAAVQ in November 2020 to conduct a learning programme re-accreditation (Re-LPA) of the two programmes. HKCAAVQ formed an expert Panel (Panel Membership at Appendix I) for this Re-LPA exercise. In view of the outbreak of the Coronavirus Disease-2019 (COVID-19), the site visit was conducted by the Panel via videoconference on 24-26 February 2021 to reduce social contact. HKCAAVQ's *Manual for the Four-stage Quality Assurance Process under the Hong Kong Qualifications Framework (Version 1.2, November 2020)* was the guiding documents for THEi and the Panel in conducting this exercise.
- 3.6 In consideration of THEi's track record established from previous accreditation exercises, information on the following aspects of the Programmes was not required in accordance with HKCAAVQ's Differentiation Approach:

Accreditation Standard	Information Not Required
LPA-2 Learner Admission and Selection	non-programme specific information
LPA-3 Programme Structure and Content	information of General Education (GE) modules are exempted
LPA-4 Learning, Teaching and Assessment	non-programme specific information
LPA-5 Programme Leadership and Staffing	Institute-wide staffing and staff-development policy
LPA-6 Learning, Teaching and Enabling Resources/Services	Institute-wide financial and physical resources; students support services
LPA-7 Programme Approval, Review and Quality Assurance	Institute-wide QA system and mechanism

4. PANEL'S DELIBERATIONS

4.1 Programme Objectives and Learning Outcomes

The learning programme must have objectives that address community, education and/or industry needs, with learning outcomes that meet the relevant HKQF standards, for all exit qualifications from the Programme.

BSc-ICT

4.1.1 The Panel noted the recommendations made by the last Accreditation Panel in 2016 (2016 recommendations):

- a) In implementing its recruitment plan, THEi should ensure an appropriate mix of expertise to meet the needs of the Programmes
- b) THEi should articulate more clearly the attributes of teamwork in the Programme intended learning outcomes;

- c) THEi should cover topics from the field of human-computer interaction within the curriculum in a more comprehensive and coherent manner;
- d) THEi should review the design of the networking modules to facilitate coherent and effective delivery of the curriculum; and
- e) THEi should review the assessment weightings in the networking modules and their alignment with the module intended learning outcomes.

4.1.2 The Operator reported that actions had been taken to address the above recommendations, through a) recruiting more staff in multiple areas of expertise; b) revision of some modules contents to enhance the attributes related to teamwork; c) increase in more human-computer interaction elements into existing and new modules; d) realigning module sequence and title of some modules; and e) updating of assessment weightings to reflect the emphasis on application, designing and evaluation of the networking concepts. (*Implementation and Actions Taken in Response to HKCAAVQ Recommendations, Main Submission*, pp.22-25). After the exchange with the Operator, the Panel considered that the recommendations were addressed in general.

4.1.3 In this exercise, the Operator proposed to change the programme title from *BSc (Hons) in Information and Communications Technology* to *BSc (Hons) in Digital and Intelligent Technology*, as a strategy for better reflecting the updates of teaching content and attracting students. To this end, the Operator proposed to make the following adjustments to the curriculum to match the new programme title:

- a) renaming two modules
- b) introduction of new core modules
- c) replacing some old modules
- d) changing core modules to electives

4.1.4 To better reflect the newly modified contents of the Programme, the Operator further proposed to revise Programme Learning Outcomes (PLOs) PLO1 and PLO 2 as follow:

Existing PLOs	Revised PLOs
PLO1: apply knowledge in mathematics, software programming, computer networking, <u>multimedia web development</u> and <u>database</u> to address complex problems in the context of the <u>information and communications technology</u>	PLO1: apply knowledge in mathematics, software programming, computer networking, web development and data science to address complex problems in the context of the digital and intelligent technology
PLO2: identify, analyse and solve operational and abstract problems in arrange of <u>software systems</u> and <u>game applications</u> in the field of information and communications technology	PLO2: identify, analyse and solve operational and abstract problems in a range of digital systems and intelligent applications in the field of digital and intelligent technology .

4.1.5 After consideration in detail, the Panel was not in support of the request for title change. Even with the intended changes, the modified curriculum does not commensurate with the new title, as the essential elements of digital intelligence technologies was lacking. The Panel considered the current programme title is a better reflection of the curriculum content; and is in close alignment with the existing POs and PLOs. Accepting the Panel's advice, the Operator decided not to change the programme title. Thus, the current title of *BSc (Hons) in Information and Communications Technology* remains unchanged.

4.1.6 The Panel reviewed the Programme's attainment of Programme Objectives (POs) and PLOs based on the following information supplied by the Operator:

- a) Student feedback on the programme outcomes (Table 3.6, BSc-ICT Main Submission, p.43);
- b) Samples of teaching learning materials of selected core and elective modules;
- c) Samples of marked scripts of core and elective modules, of high, medium and low performance range; and
- d) Reports from External Examiners (EEs).

4.1.7 The Operator has confirmed the following objectives for the Programme:

POs	Details
PO 1	equip students with a solid foundation and up-to-date knowledge and skills in information and communications technology that will prepare them for professional careers in the information and communications technology industry;
PO 2	develop students' professional competence in applying information and communications technology for the provision of professional computer services in software development and game applications, and solution formulation for technical system problems;
PO 3	develop students' problem-solving skills in software design, operation and maintenance of information systems, as well as good communication skills for working effectively in the information and communications technology discipline;
PO 4	strengthen students' commitment and awareness of ethical and societal considerations, including those related to public health, safety and environmental sustainability; and
PO 5	develop students' abilities to keep abreast of developments in the information and communications technology profession, and to pursue independent and lifelong learning.

4.1.8 The Programme has the following PLOs (Degree Award):

PLO	Details
PLO 1	apply knowledge in mathematics, software programming, computer networking, multimedia web development and database to address complex problems in the context of the information and communications technology;
PLO 2	identify, analyse and solve operational and abstract problems in a range of software systems and game applications in the field of information and communications technology;
PLO 3	develop and evaluate relevant strategies for system design and implementation according to user requirements, hardware architecture, and software development platforms with contemporary information and communications technology;

PLO 4	conduct technical research in the field of information and communication technology for solution formulation and recommendation for improvement;
PLO 5	cope with and manage the contemporary advancement related to information and communication technology development in dynamic environments;
PLO 6	communicate and work effectively in teamwork and with different stakeholders in the information and communication technology industry; and
PLO 7	reflect on professional responsibilities with lifelong learning attitude and stay abreast of contemporary issues regarding public health, safety, financial, legal, environmental, ethical and societal considerations for benefitting society in an all-round manner.

4.1.9 By comparing the programme structure and content with the POs, the Panel was of the view that the programme content has insufficient coverage on current contents of ICT, for instance, topics concerning Internet of Things (IoT), Blockchain, digitalisation and digital transformation; hence not having the currency for preparing the sought-after IT professionals for the industry as claimed in PO 1, or attaining PO 2 of developing professional competence. The Programme in general appears to be providing foundation knowledge and generic in approach.

4.1.10 For the Programme to achieve its objectives and keep students abreast of the latest development in ICT (PO 5), the Panel made the following recommendations:

- a) The BSc-ICT is **recommended** to review the currency of the Programme to include contemporary topics in their teaching content and to regularly introduce updated concepts and daily examples on the emerging technologies, such as the IoT, Smart City, cyber security, etc. so that students are acquainted with the trends of the industry;
- b) to review relevant modules, particularly in relation to web design, app design, and mobile computing; and

- c) to restructure modules such as *Multimedia Websites Design and Practices*, *Web Applications Development and Mobile Applications Development*, *Modern Web Technology Development* to better model current practices.

4.1.11 Notwithstanding to the above recommendations, the Panel considered the POs and PLOs of the Programme were attained as a whole during the last validity period.

4.1.12 The Panel noted that the Programme also offers a Higher Diploma qualification as the intermediate exit award (at QF Level 4) for students to exit the Programme upon successful completion of the required 315 QF credits and other stipulated requirements within the timeframe which has been changed from 5 semesters to 2.5 years with the approval of the Panel. No significant change to the exiting PLOs for the Higher Diploma Programme was noted (For details, refer to Graduates Profile in Appendix 2).

BSc-SUR

4.1.13 The Panel noted the recommendations made by the last accreditation Panel in 2016 which were:

- a) In implementing its recruitment plan, THEi should ensure an appropriate mix of expertise to meet the needs of the Programmes;
- b) THEi should articulate more clearly the attributes of multi-disciplinarity in the Programme intended learning outcomes; and
- c) THEi should strengthen the provision of content on green building assessment and assessment tools to ensure that all students become acquainted with this important area.

4.1.14 The Panel noted the actions taken by the Operator in response to the 2016 recommendations, including staff recruitment, revisions in PLOs, and adding related topics/ modules (full details refer to *Implementation and Actions Taken in Response to HKCAAVQ's Recommendations*, Main submission, pp.24-25) and was satisfied with the response.

4.1.15 The Panel was provided with the following information with regard to the Programme's attainment of POs and PLOs:

- a) Student feedback on the programme outcomes (Table 3.6 on p.40 of BSc-SUR Main Submission Dec 2020);
- b) Samples of teaching learning materials of selected core and elective modules;
- c) Samples of marked scripts of core and elective modules, of high, medium and low performance range;
- d) Reports from External Examiners;
- e) Summary of employment status of BSc graduates in Surveying (AY17/18 to AY19/20) (provided at the site visit, 24/02/2021)

4.1.16 The Operator confirmed that BSc-SUR has the following POs:

POs	Details
PO 1	Equip students with solid fundamental knowledge of construction, management, law and economics that will prepare them for professional careers in the surveying industry;
PO 2	Develop students' integrative abilities in using proper approaches and research methodologies in problem-solving and solution design for professional practice;
PO 3	Develop students' professional practice skills, independent problem-solving skills as well as good communication and teamwork skills required in the planning, development, design, construction, and occupancy stages so that they can work effectively in a multi-disciplinary project;
PO 4	Strengthen students' commitment to understand the importance of ethical and societal considerations, including those related to health, safety and sustainable built environment; and
PO 5	Build up students' leadership skills with national and international visions in their professional surveying career, and lifelong learning attitude.

4.1.17 In alignment with the POs, BSc-SUR has the following PLOs (Degree Award):

PLO	Details
PLO 1	Demonstrate an informed understanding of the subjects of surveying, and in the skillful realisation of principles, processes and tools necessary for the practice of surveying;
PLO 2	Employ practice and research methodologies to deal with technological and theoretical issues in surveying within a multi-disciplinary environment, and synthesise knowledge and skills for complex and strategic solutions;
PLO 3	Adopt an all-rounded legal, environmental, social and cultural, economic, ethical and technical approach to surveying practice;
PLO 4A	(BS, GP and PD Stream): Apply professional knowledge and skills learned to perform the professional roles and tasks within a multi-disciplinary environment, at planning, development, construction and asset management phases of the building life cycle, and demonstrate in-depth understanding of social responsibility for a sustainable future;
PLO 4B	(QS and PFM Stream): Apply professional knowledge and skills learned to perform the professional roles and tasks within a multi-disciplinary environment, at pre- and post-construction, and property/facility management phases of the building life cycle, and demonstrate in-depth understanding of social responsibility for a sustainable future;
PLO 5A	(BS, GP and PD Stream): Manage the development, construction and asset management projects within a multi-disciplinary environment with professional attitudes, knowledge and skills, as well as competence, effectiveness, and good leadership;
PLO 5B	(QS and PFM Stream): Manage the construction cost and property/facility management projects within a multi-disciplinary environment with professional attitudes, knowledge and skills, as well as competence, effectiveness, and good leadership;
PLO 6	Communicate and negotiate effectively with fellow professionals and stakeholders by utilising verbal and written communication skills, as well as other soft skills; and
PLO 7	Formulate a professional development plan for career growth and/or further studies.

- 4.1.18 In consideration of the above, the Panel formed the view that the Programme has attained its objectives that address industry needs. The learning outcomes meet the QF standards at QF Level 5 during the last validity period. The Panel also regarded that the POs and PLOs were attained in general.
- 4.1.19 The Panel noted that the Programme offers a Higher Diploma qualification as the intermediate exit award (at QF Level 4) for students to exit the Programme upon completing the required 315 QF credits and other stipulated requirements within the timeframe. In this re-accreditation exercise, the Operator proposed and the Panel accepted the change of the study timeframe from 5 semesters to 2.5 years. According to the Operator, no significant change was made to the exiting PLOs for the Higher Diploma Programme (Refer to the Graduates Profile in Appendix 2).

BSc-ICT and BSc-SUR

- 4.1.20 With reference to PO 3 of both BSc-ICT and BSc-SUR, which highlights teamwork and communication skills, the Panel observed that the specific skills were rather weak in students and graduates during videoconferencing with them. Thus, a recommendation is put forth for the programmes:

The BSc-ICT and BSc-SUR are **recommended** to put more focus on soft skill training including presentation and interpersonal skills which are of major importance to employers.

4.2 Learner Admission and Selection

The minimum admission requirements of the learning programme must be clearly outlined for staff and prospective learners. These requirements and the learner selection processes must be effective for recruitment of learners with the necessary skills and knowledge to undertake the Programme.

BSc-ICT and BSc-SUR

- 4.2.1 Both BSc-ICT and BSc-SUR programmes follow the Institute's minimum admission requirements for the standard and non-standard entry to Year 1 (degree programmes):

Standard Entry		Non-Standard Entry
Local Qualification	Non-local Qualification	
<u>HKDSE</u> Level 3 in - Chinese Language - English Language Level 2 in - Mathematics - Liberal Studies 1 Elective Subject or an Applied Learning (ApL) Subject[#] [#] An "Attained" in a relevant ApL subject is regarded as equivalent to an Elective Subject at Level 2. <u>HKALE</u> - Grade E in HKALE (AS-Level) Chinese Language & Culture or A-Level Chinese Literature or Grade D in an HKCEE language other than Chinese and English, and - Grade E in HKALE (AS-Level) Use of English; and - Grade E in 1 HKALE A-Level or 2 other AS-Level subjects; and - Grade E / Level 2 in 5 HKCEE subjects, including English Language and Chinese Language	<u>Mainland China</u> - A score for admission to Mainland 2nd-tier universities in the National College Entrance Examination (全國普通高等學校統一招生考試) (NCEE) or equivalent; and - A score above 100 out of a maximum of 150 for the English Language <u>International Baccalaureate (IB)</u> - Holder of an International Baccalaureate Diploma; and - One of the following English Language results: - Grade 4 or above in IB English A1 or A2 (Higher or Standard Level); or - Grade 4 or above in IB English B (Higher Level); or - Grade 5 or above in IB English B (Standard Level); or - Grade 4 or above in IB English A: Language and Literature (Higher or Standard Level); or - Grade 4 or above in IB English A:	To be determined by the Faculty Dean on a case-by-case basis

	Literature (Higher or Standard Level); or - Grade 4 or above in IB English Literature and Performance (Standard Level). <u>Business and Technology Education Council (BTEC)</u> • Holder of a BTEC Level 3 Diploma of "MM" Grades or a BTEC Level 3 Extended Diploma of "MPP" Grades*; and • Grade C / Grade 4 or above in IGCSE English Language or English as a Second Language. <i>"M" stands for Merit and "P" stands for Pass</i> <u>Other Non-local Qualifications</u> • Equivalent HKDSE qualifications, achieving a standard of English equivalent to the HKDSE's English Language Level 3	
Admission into Full-time Year 3 / Part-time Year 5* of the Institute's Undergraduate Bachelor's Degree Programmes Applicants with a VTC HD or equivalent sub-degree qualifications/studies in the relevant streams may be admitted into Year 3 of full-time mode and Year 5 of part-time mode* of the degree programme, if they pass an interview to assess their suitability.		

* admission to Year 5 of part-time mode does not apply to BSc-SUR programme.

- 4.2.2 In line with the general expectation on self-financed operators in safeguarding teaching and learning quality and thereby upholding the credibility and recognition of the qualifications, the percentage of Year 1 non-standard admissions is capped on a programme basis at a maximum of 5% of the actual number of Year 1 new students of the year. The Programmes will adhere to this policy.
- 4.2.3 In light of the low enrolment figures for BSc-ICT in recent years, for example, 17 Year-1 students admitted (against the quota of 66) in AY 2019/20, and 4 in AY 2020/21; 17 Year-3 students (against the quota of 66) in AY 2019/20 and 22 in AY 2020/21 (Table 2.2, BSc-ICT Main Submission, p.34). The Panel showed concern over the sustainability of the Programme in the coming years.
- 4.2.4 The BSc-SUR also has low enrolment figures in recent years, for example, 20 Year-1 students admitted (against quota of 99) in AY 2019/20, 9 in AY 2010/21; 14 Year-3 (against the quota of 66) in AY 2019/20 and 16 in AY 2020/21 (Table 2.2, BSc-SUR Main Submission, p.29). The Panel shared the same concern over the sustainability of the Programme in the long term.
- 4.2.5 Given the economic uncertainty and travel restrictions brought by the COVID pandemic lately, the Panel found the student growth projection of the Operator based on information from the *Report on Manpower Projection to 2027* (Hong Kong SAR, Dec 2019) was a little too ambitious. To attract more students particularly students from Mainland China, the Panel emphasised the need for a strengthened overall strategy and put forth the following recommendation:

The BSc-ICT and BSc-SUR programmes are **recommended** to reconsider their niche in the market and target students before developing a coherent and effective strategy, including marketing and student support services, to ensure long-term sustainability and growth for the programmes.

- 4.2.6 Other than the above issue to be improved, the admission criteria (as in para. 4.2.1) and student quota for the two programmes shall be aligned with the approved admission quota as below:

Programme	Year-1 Entry	Year-3 Entry	Year-5 Entry#	Maximum New Students Per Year
BSc-ICT				
Full-time (4 years)	66	66		132
Part-time (8 years with entry at Year-5)			30	30
BSc-SUR				
Full-time (4 years)	99	66	N/A	165

Note: #BSc-ICT Part-time Programme

4.3 Programme Structure and Content

The structure and content of the learning programme must be up-to-date, coherent, balanced and integrated to facilitate progression in order to enable learners to achieve the stated learning outcomes and to meet the programme objectives.

BSc-ICT

4.3.1 The BSc-ICT offers both full-time (FT) (4 years in duration) and part-time (PT) modes (8 years with the entry point at Year-5) of study. The Programme consists of 45 modules representing a total of 132 Institute Credit Points or 554 QF Credits, with the inclusion of one non-credit bearing *Work-Integrated Learning* (WIL) module (minimum of 200 hours for the degree award and 90 hours for HD exit).

4.3.2 The Panel noted the distribution of the General Education (GE) and Industry/ Profession Specific (IPS) modules and Credit Points (CPs) by Type and QF Level (Degree Programme) as in the following table. The GE component accounts for 27.3% of the total curriculum and the IPS 72.7%.

Module Type		Year 1 & 2 CP		Year 3 & 4 CP		No. of Modules	Total Institute Credit Points	
		QF-L4	QF-L5	QF-L4	QF-L5		No.	%
General Education	GE Core (English)	3		-	6	3	9	27.3

(GE) Modules	GE Core (Chinese)	3	-	-	3	2	6	72.7
	GE Core	6	3	-	-	3	9	
	GE Elective	-	6	-	6	4	12	
Industry/ Profession Specific (IPS) Modules	Programme Core	45	-	-	45	30	90	72.7
	Programme Elective	-	-	-	6	2	6	
	WIL*	-	-	Nil*	-	1	Nil*	
Total:		66 (50%)		66 (50%)		45	132 (100%)	
Total Number of OF Credits								554

* WIL module carries no CP.

4.3.3 Students can choose to exit the Programme with a Higher Diploma (HD) award after completing the first 2.5 years, achieving 75 Institute Credits or 315 QF Credits, and completing two non-credit bearing modules, which are the *E-Learning Package: English for Workplace Communication* and *WIL*.

4.3.4 In response to the recommendation on human-computer interaction made by the last accreditation panel in 2016, the Operator has revised the focus of 4 existing modules (*Multimedia Websites Design and Practices*, *Mobile Applications Development*, *Game Engines and Game Development*, and *Data Visualisation and Interface Design*) to build up students' competency in making user-friendly designs for websites, mobile applications, and data/ graphic visualisation. One new module of *Embedded Systems and Hardware Interface* was further added to enhance human-computer interaction skills in students.

4.3.5 As recommended by the Panel in the previous accreditation exercise, the Operator has reviewed the design of the networking modules to facilitate a more coherent and effective delivery of the curriculum by mapping with the pathway for obtaining industry certificates, rearranging the sequence of the modules, and renaming a model to meet the demand of the industry.

4.3.6 In order to articulate more clearly the attributes of teamwork in the programme learning outcomes, several modules have their contents enhanced, for example, students are required to develop technical solutions in groups in *Enterprise Architecture and System Development*. In *Software Development Project*, the content has been enhanced with teamwork elements such as conflict

management, negotiation, group dynamics, leadership styles, and groupware.

4.3.7 Despite the various changes introduced in response to the 2016 recommendations, the Operator confirmed that the notional learning hours of the curriculum remained unchanged.

4.3.8 In the modules currently offered, the Panel found that the contents are geared toward a somewhat dated view of IT, such as the traditional computer programming techniques. The Panel has the following recommendations:

The BSc-ICT is **recommended** to review the currency of the Programme:

- a) to include contemporary topics in their teaching content and to regularly introduce updated concepts and daily examples on the emerging technologies, such as, the IoT, Smart City, cyber security, etc. so that students are acquainted with the trend of the industry;
- b) to review relevant modules, particularly in relation to web design, app design, and mobile computing; and
- c) to restructure modules such as *Multimedia Websites Design and Practices*, *Web Applications Development and Mobile Applications Development*, *Modern Web Technology Development* to better model current practices.

4.3.9 While the Operator was projecting a high demand for system analysts and software engineers, the existing programme structure and content, which emphasise training students as project managers and programmers, clearly does not match the future employment market. To enhance the employability of graduates, the Panel has the following recommendation:

The BSc-ICT is **recommended** to stay close to the industry by establishing a platform in connection with stakeholders of the industry which should meet at least twice a year to solicit input and advice on the curriculum and regular feedback on the performance of graduates.

4.3.10 The latest version of IPS modules in the BSc-ICT 4-year (full-time) curriculum content is shown below. The modules are categorised into the Programme Core and Electives modules distributed in different years of study.

Year 1 Core Modules	
Information Technology Essentials	Applied Mathematics for Science & Technology
Introduction to Programming	Network Fundamentals
Object-Oriented Programming	Database Principles
Discrete Mathematics, Probability & Statistics	Multimedia Websites Design & Practices
Year 2 Core Modules	
Operating Systems & Architecture	Data Structures & Algorithms
Web Applications Development	IT Professionalism
Software Engineering & Project Management	Software Development Project
Object-Oriented System Analysis & Design	
Year 3 Core Modules	
Programme Elective 1 (depending on selected module)	Network Switching & Routing
Mobile Applications Development	Cloud Computing
Game Engines & Game Development	Enterprise Architecture & System Development
Advanced Database Systems	Work-integrated Learning
Year 4 Core Modules	
Final Year Project	Enterprise Network Technologies
Cybersecurity Operations	Advanced Topics in Information and Communications Technology
Machine Learning	Programme Elective 2 (depending on selected module)
Data Science	Programme Elective 3 (depending on selected module)
Modern Web Technology & Development	
Programme Elective Modules	
Data Visualization & Interface Design	2D/3D Graphics Programming
Big Data & Enterprise Search Engines	Embedded Systems & Hardware Interface
Game Design with Artificial Intelligence and Expert Systems	Object-Oriented Framework & Design Patterns
Distributed Systems & Computing	Game Software Technology & Development

BSc-SUR

- 4.3.11 The BSc-SUR offers only full-time mode with 4 years in duration. The Programme consists of 44 modules, representing a total of 132 Institute Credits or 554 QF Credits, including one non-credit bearing *Work-Integrated Learning* (WIL) module (a minimum of 240 hours for the degree award).
- 4.3.12 Students can choose to exit the Programme with a Higher Diploma (HD) award after the completion of 27 modules after the first 2.5 years, representing 75 Institute Credit Points or 315 QF Credits, as well as two non-credit bearing modules, namely, WIL (a minimum of 90 hours) and E-Learning Package: English for Workplace Communication.
- 4.3.13 The table below shows the distribution of the GE and IPS modules and Credit Points (CPs) by Type and QF Level (Degree Programme). These IPS modules are divided into 4 categories, namely, Programme Core, Stream Core, Programme Elective and Work-related Learning (WIL). The GE component accounts for 27.3% of the total curriculum and the IPS 72.7%.

Module Type		Year 1 & 2 CP		Year 3 & 4 CP		No. of Modules	Total Institute Credit Points	
		QF-L4	QF-L5	QF-L4	QF-L5		No.	%
General Education (GE) Modules	GE Core (English)	3		-	6	3	9	27.3
	GE Core (Chinese)	3	-	-	3	2	6	
	GE Core	9	-	-	-	3	9	
	GE Elective	-	3	-	9	4	12	
Industry/ Profession Specific (IPS) Modules	Programme /Stream Core	24	21	-	42	28	87	72.7
	Programme Elective	-	-	-	6	3	9	
	Work-Integrated Learning*	-	-	Nil*	-	1	Nil*	
Total:		66 (50%)		66 (50%)		44	132 (100%)	
Total Number of OF Credits							554	

* Work-Integrated Learning (WIL) module carries no CP.

4.3.14 In response to the HKCAAVQ's recommendations in 2016 accreditation, the Operator had made the following changes:

- a) To ensure an appropriate mix of expertise to meet the needs of the Programme, professionals from different industry sectors have been employed.
- b) To articulate more clearly the attributes of multi-disciplinarity in the Programme intended learning outcomes, the Operator has amended PLO 2 to include 'multidisciplinary environment' for clear articulation.
- c) To strengthen the content on green building assessment and assessment tools, related topics were added to the three existing modules of '*Complex Property Management*', '*Sustainable Building Design & Structure*, and '*Advanced Valuation and Property Principles*' and a new elective module '*Sustainability in the Built Environment*' was introduced which help students to become acquainted with this important area.

4.3.15 The Panel noted that the Operator will carry out the following changes (new/ renamed/ revised) in the syllabi of Industry/Professional-Specific (IPS) Modules with effect from AY2021/22:

- a) Programme Core '*Building Control & Maintenance*' and '*Maintenance & Improvement*' to be replaced by a new module named '*Building Control, Maintenance and Improvement*' with updated module outline/content, whereas CP, QF level and pre-requisite remain the same;
- b) Under the QS/PFM Stream, Module '*Engineering Contracts & Practice*' to be renamed to '*Engineering Contracts & Risk Management*' with revised module outline/content accordingly. Module '*Construction Value & Risk Management*' to be replaced by a new module '*Advanced Measurement & Estimating*' with the same CP, QF level and pre-requisites.
- c) In the module of '*Construction Cost & Economic*', the topics estimating & tendering are removed and the module learning outcome is elaborated to cover budgetary control, cash flow and interim valuation.

- d) Two new elective modules to be added, which are '*BIM Visualisation & 3D Modeling*' and '*BIM for Cost & Facility Management*' in response to the industry demands and development.

4.3.16 The latest version of IPS modules in the curriculum is shown as below:

Year 1		
Introduction to Law Property Asset Management Introduction to Construction Technology Facility Management Building Science Architectural Design & Technology Computer Aided Drafting & Building Information Modelling Building Measurement & Documentation		
Year 2		
Sustainable Building Design & Structures Land & Real Estate Economics Tall Building Construction Building Procurement & Contract Administration Development Control Surveying Studio I Building Services Programme Elective 1		
Year 3 Common Modules	BS/GP/PD Stream	QS/PFM Stream
Land Law & Conveyancing Law	Programme Elective 2	Programme Elective: Dispute Resolution
Surveying Studio II	Real Estate Investment & Finance	Property Management Practice
Graduation Project 1: Research Proposal	Construction Management	Accounting & Financial Control for Property & Facility Management
Work-integrated Learning	Advanced Valuation & Property Principles	Engineering Contracts & Practice ¹
	Planning & Land Use Analysis	Construction Cost & Economics
Year 4 Common Modules	BS/GP/PD Stream	QS/PFM Stream
Project Management	Building Control & Maintenance ²	Programme Elective: Advanced Contract Administration

Surveying Studio III	Real Estate Portfolio Management	Construction Value & Risk Management ³
Graduation Project 2: Thesis Report	Conversion & Adaptation of Buildings	Maintenance & Improvement ²
	Programme Elective 3	Complex Property Management
Surveying Core Areas	Programme Elective Modules	
Economics	Principle of Project Finance	
	#Introduction to Environmental Economics	
Management	Technology Integration for Facility Management	
	Design Management	
	*BIM Visualization & 3D Modelling	
	*BIM for Cost & Facility Management	
Law	Dispute Resolution	
	Environmental Impact Assessment	
	Design of Environmental & Sustainable Facilities	
	+Advanced Contract Administration	
Construction	Site Remediation & Landfill Design	
	Sustainability in the Built Environment	
	Renovation, Refurbishment & Conservation	
	Green Architecture & Sustainable City	
	+Road, Traffic & Landscape	
	+Theory: Environmentalism & Sustainable City	
	+Advanced Technology in Landscape Design	
	+Urban Planning and Design	
	+Habitat Creation	
	#Engineering Surveying	

* New elective modules starting 2021/22

For HD exit award only

+ Elective modules introduced after the 2016 LPA exercise

¹ The module will be renamed to *Engineering Contracts & Risk Management*, starting 2021/22

² The module will be replaced by a new module *Building Control, Maintenance and Improvement*, starting 2021/22

³ The module will be replaced by a new module *Advanced Measurement & Estimating*, starting 2021/22

4.3.17 The Panel noted that the Programme consists of two specialised streams with a total of five different sub-disciplines. The Panel queried the unusually broad coverage of the Programme which the employers and WIL providers also shared at the site visit. The Operator explained that the division of sub-disciplines is meant to provide specialised learning and training for specific careers. However, the employment information provided by the Operator during the site visit showed that most students were engaged in a

couple of fields after graduation, thus raising the question of the effectiveness of the diversified curriculum. The Operator expressed their awareness of this and considered diversity is necessary for keeping their distinctiveness in the market.

- 4.3.18 For better focusing of the Programme, the Panel made the following recommendations:

BSc-SUR is **recommended** to review the diversity and breadth of the Programme, given that most graduates of this Programme appear to work in the fields of QS and BS. This should not lead to reduced multi-disciplinary experience for students.

- 4.3.19 Notwithstanding the above observations, the Panel viewed the programme structure and content of BSc-ICT and BSc-SUR are in order.

4.4 Teaching, Learning and Assessment

The learning, teaching and assessment activities designed for the learning programme must be effective in delivering the programme content and assessing the attainment of the intended learning outcomes.

BSc-ICT

- 4.4.1 The Panel noted that, in response to the 2016 recommendation on assessment weightings of the networking modules, the Operator has updated the assessment weightings since AY 2019/20 to assign more weight to application, design and evaluation of the networking concepts in the relevant modules in order to align closer to the Module Intended Learning Objectives (MILO) (Table 1.6, BSc-ICT Main Submission, p.26)
- 4.4.2 The Panel noted that examinations had been removed as a mode of assessment from the two modules of *Network Switching and Routing*, and *Systems and Network Security*. To answer the Panel's query about the integrity of assessment in the form of practical and theory tests, the Operator explained that since these two modules are more practice-oriented, therefore practical and theory tests have been used to replace the examination and are found to be a better form of assessment for these two modules. Furthermore, these practical and theory tests take place in designated areas within the specified time allowed. The Panel was satisfied with the

Operator's explanation which seems to be supported by the grade distributions of these two modules in AY 2016/17, 2017/18 and 2018/19.

4.4.3 The Panel observed from student assignments and discussions with the teaching staff during the site visit that, quotes from YouTube and other social media were allowed to be used for academic citations. The issue was raised by the Panel, especially when no guideline or policy for governing the use of non-peer-reviewed materials from the Internet. The Operator was **advised** to provide students with appropriate guidelines on Internet surfing for academic citations.

4.4.4 As ICT is a fast-changing discipline requires frequent updating of knowledge in the field, the Panel found that some reading materials and suggested book lists are rather dated. For example, a textbook listed was published in 2015. Since the Programme aims at developing students' abilities 'to keep abreast of developments in the ICT profession' (as in PO 4), the Panel considered the situation not desirable and made the following recommendation:

BSc-ICT is **recommended** to undertake a thorough review of all recommended textbooks and reading to ensure the currency and appropriateness of the reference texts and teaching materials.

4.4.5 The Panel was provided with the following documents for review in relation to teaching, learning and assessment:

- a) Samples of teaching and learning materials of three core and three elective modules; and
- b) Samples of marked assignments and examination scripts of three core and three elective modules, with samples from the high, medium and low-performance ranges.

4.4.6 Having reviewed the above documents and discussed with representatives of the Operator, the Panel considered that the samples provided could demonstrate achievement of learning outcomes of QF Level 5. The Panel noted that the Operator took actions to ensure the effectiveness of teaching and learning of the Programmes during the validity period.

BSc-ICT and BSc-SUR

- 4.4.7 Both Programmes use various teaching and learning activities, including lectures, seminars, tutorials, studios, lab works, site visits, graduation/ final year projects, and WIL to enhance student participation, learning quality and performance outcome.
- 4.4.8 Both Programmes employ various assessment methods such as written assignments, presentations, projects, tests and examinations, with emphasis on continual assessments in all modules. These assessment tasks allow teachers to give timely feedback to students.
- 4.4.9 The Panel regarded both programmes to clearly communicate to students about assessment criteria and performance standards before an actual assessment is conducted.
- 4.4.10 The Panel noted that teaching staff would provide timely feedback to students on their assignments through weekly meetings. Students are guided and advised by their supervisors in research proposals.
- 4.4.11 Given the important role of the EEs in the academic QA, the appointment of EEs is expected to be a stringent process. Mechanism has to be set in place to safeguard impartiality of EEs when playing such a role. Moreover, EEs should have relevant discipline knowledge and field experiences. From the credentials and experience of the EEs, the Panel observed that EEs' expertise do not seem to cover all sub-disciplines/ specialised areas. The Panel also found that the EE reports were relatively brief and rarely critical. The Panel noticed from the Response to the initial comments(Q19 and Q20, pp21-22) that the Operator follows consistently procedures of the current moderation mechanism, and have taken measures to cope in case when there is grade inflation, such as to adjust the level of difficulty in examination papers. Though it was effective in the past, the Operator is recommended to address directly to the cause(s) of the problem for design a set of tackling methods. To ensure a balanced view on students' performance tasks as well as to avert inducing potential problem to the programme development in the long run, the following recommendation is put forth:

BSc-ICT and BSc-SUR are **recommended** to review the appointment process of external examiners to ensure that they have appropriate experience and qualifications for the areas they are examining. The Operator should also review the processes undertaken by the external examiners to ensure that all aspects of the assessment are adequately reviewed.

- 4.4.12 Considering information gathered in the accreditation documents and site visit discussions, the Panel concluded that the learning, teaching and assessment activities designed for the BSc-ICT and BSc-SUR programmes had been effective in delivering the programme contents assessing students' attainment of the intended learning outcomes.

4.5 **Programme Leadership and Staffing**

The Operator must have adequate programme leader(s), teaching/training and support staff with the qualities, competence, qualifications and experience necessary for effective programme management, i.e. planning, development, delivery and monitoring of the Programme. There must be an adequate staff development scheme and activities to ensure that staff is kept updated for the quality delivery of the Programme.

BSc-ICT & BSc-SUR

- 4.5.1 In response to the 2016 recommendation on implementing a staff recruitment plan for ensuring an appropriate mix of expertise to meet the needs of the programmes, the Operator reported that qualified professionals have been recruited in both full-time and part-time capacities to ensure the delivery of modules in high academic standards.
- 4.5.2 As of 30 November 2020, there were 7 full-time and 2 part-time teaching staff for BSc-ICT. The Panel was noted that the Programme Leader has also left the team recently. The BSc-ICT Team explained that staff member(s) left was due to a number of factors that were beyond the control of the Programme but the recruitment exercise was in progress. For BSc-SUR, there has been 5 full-time and 26 part-time teaching staff. In response to the Panel's comment on the high proportion of part-time staff, the BSc-SUR Team explained that the engagement of such a large number of part-time teaching staff was due to the need for professionally-related experts from different fields of surveying to input up-to-date information in teaching.

- 4.5.3 In view of the large number of PT staff employed particularly in BSc-SUR, the Panel questioned how the PT staff work cooperatively with full-time staff and ensure students have adequate support from the PT teaching staff. For achieving these objectives, the Operator confirmed that FT module convenors have been appointed to take care of the day-to-day operation, quality assurance and improvement of the modules, with a leading role in the learning and teaching activities, and in the case of BSc-SUR, to keep close contact with PT teaching staff to monitor students' learning progress and performance. To achieve the best effect from the use of part-time staff, the Panel has the following recommendation:

The BSc-ICT and BSc-SUR Programmes are **recommended** to develop a clear structure and set of guidelines on the employment of PT teaching staff to ensure that every module is presented in a coherent and coordinated manner and that students have fair and reasonable access to a responsible staff member for each module.

- 4.5.4 From the staff profiles provided, the Panel considered that the teaching staff is qualified to perform their duties in the Programmes. The development activities for teaching staff, including development in pedagogy, training for online teaching, and professional and disciplinary knowledge are deemed appropriate in general.

BSc-ICT

- 4.5.5 The Panel was informed that the Programme would provide an induction to new staff and staff development opportunities. After reviewing the list of staff development training, workshops attended, and research projects conducted (Annex Q26, Supplement/Addendum), most of which are not profession-specific, the Panel felt strongly that more staff development of higher levels are required. Furthermore, strategies addressing the recruitment and retention of staff with talent and expertise are also required. To this end, the Panel has the following recommendation:

BSc-ICT is recommended to increase the level of staff development (including attendance at appropriate conferences) and implement a staff recruitment strategy to ensure that the staff, including part-time staff, maintain knowledge of their disciplines and that the staffing complement can adequately contribute to the development of new and innovative programmes.

- 4.5.6 As the Programme was experiencing a difficult time in its team formation when the important position holders such as the Programme Leader had recently departed from the Programme, the Panel saw the immediate benefit of establishing an industry-connected platform for collecting views, as recommended by the Panel earlier, which also provides updated information on the industry. This would be very helpful for the newly appointed leaders during the transition period.
- 4.5.7 After considering the various aspects discussed above, the Panel was of the view that the BSc-ICT and BSc-SUR Programmes have adequate and qualified staff for the delivery of programmes, and have put in staff development activities for further training and improvement of staff.

4.6 Learning, Teaching and Enabling Resources/Services

The Operator must be able to provide learning, teaching and enabling resources/services that are appropriate and sufficient for the learning, teaching and assessment activities of the learning programme, regardless of location and mode of delivery.

BSc-ICT and BSc-SUR

- 4.6.1 After reviewing the income and expenditure statements for AY2018/19 to 2019/20 and the budget estimation for AY2020/21 to 2024/25 of the Programmes, the Panel asked for a contingency plan if the breakeven student numbers could not be achieved and a financial deficit resulted. The Operator was confident that they would recruit enough students in the coming years as they will step up promotion to target more Mainland China students. Should a programme deficit in operation happen, it may be absorbed by other programmes within the Faculty that already produced a surplus.
- 4.6.2 On physical resources, the Operator gave presentations on the laboratory facilities using PowerPoint and videos through the videoconference platform. For each Programme, the Operator also provided a list of major facilities and equipment. The Operator informed the Panel that after the launch of the Programmes, several specialised laboratories had been developed primarily for supporting the Programmes delivery. The students whom the Panel met via videoconferencing expressed their satisfaction with the laboratory facilities on campus.

- 4.6.3 In response to Panel's question on support given to students particularly those of low performance, the Operator stressed that the Programme Leader, Year Tutor and Module Convenors will collectively provide timely and appropriate support to students to help resolve their problems, achieve learning outcomes, and facilitate their contact with part-time teachers.
- 4.6.4 In consideration of the above, the Panel was of the view that the Operator has adequate financial, library, and physical resources for the delivery of the Programmes.

4.7 Programme Approval, Review and Quality Assurance

The Operator must monitor and review the development and performance of the learning programme on an on-going basis to ensure that the Programme remains current and valid and that the learning outcomes, learning and teaching activities and learner assessments are effective to meet the programme objectives.

BSc-ICT and BSc-SUR

- 4.7.1 The Panel noted that the Operator has well-defined institution-wide quality assurance (QA) mechanisms in place, both at the institutional and Programme level, with various committees to ensure the maintenance and further improvement of all programs' quality. A four-stage model of Plan-Implement-Review-Improve underpins their QA system, whereas inputs are gathered from different stakeholders including staff, students, graduates, employers, external examiners, and industry partners for planning and regular reviews of the respective programmes.
- 4.7.2 Programmes are required to undergo programme review annually and periodically. Programme performance is reflected through key performance indicators covering enrolment numbers, retention rates, attrition rates, graduate employment rates, etc. The Panel was given the evidence that the BSc-ICT and BSc-SUR Programmes have been subject to on-going monitoring and periodic review with inputs from internal and external stakeholders.
- 4.7.3 In response to the needs of students and the industry, BSc-SUR took actions to revise and adjust the programme content and structure, such as rearranging the module sequencing and increasing the number of electives for students.

- 4.7.4 When the PT staff outnumbered FT staff in BSc-SUR due to the need for diverse expertise, the Programme Team decided to assign a full-time Module Convenor to coordinate teaching matters between full-time and part-time teachers.
- 4.7.5 To facilitate the identification of areas for continuous improvement and developments, students' learning experience is collected using questionnaires and the Student-Staff Consultative Committee (SSCC). For instance, in response to the BSc-ICT students' expressed request for pre-reading teaching materials in the SSCC in AY 2018/19, the Programme Team decided to upload up-to-date teaching materials to Moodle. In the case of BSc-SUR, summer classes were arranged to help those students who had difficulty with certain subjects due to their lack of prior knowledge in M2 Maths and Physics. Students' feedback/inputs are then reviewed by the respective Programme Teams and the concerned units (Quality Assurance Committee / Faculty Board) and later used to formulate improvement and follow-up action plans to improve the programmes further. The Panel noted that several revisions of the curriculum were the result of these inputs.
- 4.7.6 After the exchange with the Operator, the Panel found that the Operator has set up and followed appropriate QA mechanisms and, in general, fulfill the minimum requirements of this standard.

5. IMPORTANT INFORMATION REGARDING THIS ACCREDITATION REPORT

5.1 Variation and withdrawal of this Accreditation Report

- 5.1.1 This Accreditation Report is issued pursuant to section 5 of the AAVQO, and contains HKCAAVQ's substantive determination regarding the accreditation, including the validity period as well as any conditions and restrictions subject to which the determination is to have effect.
- 5.1.2 HKCAAVQ may subsequently decide to vary or withdraw this Accreditation Report if it is satisfied that any of the grounds set out in section 5 (2) of the AAVQO apply. This includes where HKCAAVQ is satisfied that the Operator is no longer competent to achieve the relevant objectives and/or the Programme no longer meet the standard to achieve the relevant objectives as claimed by the Operator (whether by reference to the Operator's failure to fulfil any conditions and/or comply with any restrictions stipulated in this

Accreditation Report or otherwise) or where at any time during the validity period there has/have been substantial change(s) introduced by the Operator after HKCAAVQ has issued the accreditation report(s) to the Operator and which has/have not been approved by HKCAAVQ.

Please refer to the '*Guidance Notes on Substantial Change to Accreditation Status*' in seeking approval for proposed changes. These Guidance Notes can be downloaded from the HKCAAVQ website.

- 5.1.3 If HKCAAVQ decides to vary or withdraw this Accreditation Report, it will give the Operator notice of such variation or withdrawal pursuant to section 5(4) of the AAVQO.
- 5.1.4 The accreditation status of Operator and/or Programmes will lapse immediately upon the expiry of the validity period or upon the issuance of a notice of withdrawal of this Accreditation Report.

5.2 Appeals

- 5.2.1 If the Operator is aggrieved by the determination made in this Accreditation Report, then pursuant to Part 3 of the AAVQO the Operator has a right of appeal to the Appeal Board. Any appeal must be lodged within 30 days of the receipt of this Accreditation Report.
- 5.2.2 If the Operator is aggrieved by a decision to vary or withdraw this Accreditation Report, then pursuant to Part 3 of the AAVQO the Operator has a right of appeal to the Appeal Board. Any appeal must be lodged within 30 days of the receipt of the Notice of Withdrawal.
- 5.2.3 The Operator should be aware that a notice of variation or withdrawal of this Accreditation Report is not itself an accreditation report and the right to appeal against HKCAAVQ's substantive determination regarding accreditation arise only from this Accreditation Report.
- 5.2.4 Please refer to Cap. 592A (<http://www.legislation.gov.hk>) for the appeal rules. Details of the appeal procedure are contained in section 13 of the AAVQO and can be accessed from the QF website at <https://www.hkqf.gov.hk>.

5.3 Qualifications Register

- 5.3.1 Qualifications accredited by HKCAAVQ are eligible for entry into the Qualifications Register ("QR") at <http://www.hkqr.gov.hk> for recognition under the QF. The Operator should apply separately to have their quality-assured qualifications entered into the QR.
- 5.3.2 Only learners who commence the study of the named accredited learning programme during the validity period and who have graduated with the named qualification listed in the QR will be considered to have acquired a qualification recognised under the QF.

Ref: 72/38/02
21 June 2021
JoH/SF/AIL/et

Appendix 1

Technological and Higher Education Institute of Hong Kong, Vocational Training Council

Learning Programme Re-accreditation for (i) Bachelor of Science (Honours) in Information and Communications Technology (ii) Bachelor of Science (Honours) in Surveying

24 - 26 February 2021

Panel Membership

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Appendix 2A

Graduate Profile of the Bachelor of Science (Honours) in Information and Communications Technology

Qualification Title	Bachelor of Science (Honours) in Information and Communications Technology 資訊及通訊科技（榮譽）理學士
Qualification Type	Bachelor Degree
QF Level	Level 5
QF Credits	554
Institute Credits	132
Primary Area of Study and Training	A04 Computer Science and Information Technology
Sub-area (Primary Area of Study and Training)	A0401 Computer Science and Information Technology
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable

Programme Objectives	PO1: equip students with a solid foundation and up-to-date knowledge and skills in information and communications technology that will prepare them for professional careers in the information and communications technology industry; PO2: develop students' professional competence in applying information and communications technology for the provision of professional computer services in software development and game applications, and solution formulation for technical system problems; PO3: develop students' problem-solving skills in software design, operation and maintenance of information systems, as well as good communication skills for working effectively in the information and communications technology discipline; PO4: strengthen students' commitment and awareness of ethical and societal considerations, including those related to public health, safety and environmental sustainability; and PO5: develop students' abilities to keep abreast of developments in the information and communications technology profession, and to pursue independent and lifelong learning.
Programme Intended Learning Outcomes	PLO1: apply knowledge in mathematics, software programming, computer networking, multimedia web development and database to address complex problems in the context of the information and communications technology; PLO2: identify, analyse and solve operational and abstract problems in a range of software systems and game applications in the field of information and communications technology; PLO3: develop and evaluate relevant strategies for system design and implementation according to user requirements, hardware architecture, and software development platforms with contemporary information and communications technology; PLO4: conduct technical research in the field of information and communication technology for solution formulation and recommendation for improvement; PLO5 cope with and manage the contemporary advancement related to information and communication technology development in dynamic environments; PLO6: communicate and work effectively in teamwork and with different stakeholders in the information and communication technology industry; and PLO7: reflect on professional responsibilities with lifelong learning attitude and stay abreast of contemporary issues regarding public health, safety, financial, legal, environmental, ethical and societal considerations for benefitting society in an all-round manner.

Education Pathways	Graduates of the Programme will have the opportunities to further their studies in postgraduate degree programmes on computer science, advanced information systems, software technology, information technology management, data science, etc. at local or overseas universities.		
Employment Pathways	Graduates of the Programme will be capable of assuming positions as software engineers, game software developers, network engineers, data analysts, machine learning engineers, security engineers, game software developers, system administrators and technical supports.		
Minimum Admission Requirements	The Programme follows the admission requirements of THEi's Degree Programmes as follows:		
	Standard Entry Route		Non-Standard Entry Route
	Local Qualification	Non-local Qualification	
	<u>HKDSE</u> Level 3 in - Chinese Language - English Language Level 2 in - Mathematics - Liberal Studies 1 Elective Subject or an Applied Learning (ApL) Subject # # An "Attained" in a relevant ApL subject is regarded as equivalent to an Elective Subject at Level 2.	<u>Mainland China</u> - A score for admission to Mainland 2nd-tier universities in the National College Entrance Examination (全國普通高等學校統一招生考試) (NCEE) or equivalent; and - A score above 100 out of a maximum of 150 for the English Language <u>International Baccalaureate (IB)</u> - Holder of an International Baccalaureate Diploma; and - One of the following English Language results: - Grade 4 or above in IB English A1 or A2 (Higher or Standard Level); or - Grade 4 or above in IB English B (Higher Level); or - Grade 5 or above in IB English B (Standard Level); or	To be determined by the Faculty Dean on a case-by-case basis
<u>HKALE</u> Grade E in HKALE (AS-Level) Chinese Language & Culture or A-Level Chinese Literature or Grade D in an HKCEE language other than Chinese and English; and			

	• Grade E in HKALE (AS-Level) Use of English; and • Grade E in 1 HKALE A-Level or 2 two other AS-Level subjects; and • Grade E/Level 2 in 5 HKCEE subjects, including English Language and Chinese Language - Grade 4 or above in IB English A: Language and Literature (Higher or Standard Level); or - Grade 4 or above in IB English A: Literature (Higher or Standard Level); or - Grade 4 or above in IB English Literature and Performance (Standard Level). <u>Business and Technology Education Council (BTEC)</u> • Holder of a BTEC Level 3 Diploma of "MM" Grades or a BTEC Level 3 Extended Diploma of "MPP" Grades*; and • Grade C / Grade 4 or above in IGCSE English Language or English as a Second Language. <i>"M" stands for Merit and "P" stands for Pass</i> <u>Other Non-local Qualifications</u> • Equivalent HKDSE qualifications, achieving a standard of English equivalent to the HKDSE's English Language Level 3
Mode(s) of Study and Programme Length	Admission into Full-time Year 3 / Part-time Year 5 of the Institute's Undergraduate Bachelor's Degree Programmes
	Applicants with a VTC HD or equivalent sub-degree qualifications/studies in the relevant streams may be admitted into Year 3 of full-time mode and Year 5 of part-time mode of the degree programme, if they pass an interview to assess their suitability.
	Full-time, 4 years Part-time, 4 years (Year-5 Entry to the 8-year part-time Programme)

Intermediate Exit Award(s)	Title of Qualification: Higher Diploma in Information and Communications Technology 資訊及通訊科技高級文憑 QF Level: Level 4 QF Credits: 315
Operator	Technological and Higher Education Institute of Hong Kong, Vocational Training Council (Chai Wan Campus) 133 Shing Tai Road, Chai Wan, Hong Kong

Appendix 2B

Graduate Profile of the Bachelor of Science (Honours) in Surveying

Qualification Title	Bachelor of Science (Honours) in Surveying 測量學(榮譽)理學士
Qualification Type	Bachelor Degree
QF Level	Level 5
QF Credits	554
Institute Credits	132
Name of Streams	(1) Building Surveying, General Practice, and Planning & Development (BS, GP and PD Stream) (2) Quantity Surveying, and Property & Facility Management (QS and PFM Stream)
Primary Area of Study and Training	A01 Architecture and Town Planning
Sub-area (Primary Area of Study and Training)	A0101 Architecture, Construction and Town Planning
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable
Programme Objectives	PO1: equip students with solid fundamental knowledge of construction, management, law and economics that will prepare them for professional careers in the surveying industry; PO2: develop students' integrative abilities in using proper approaches and research methodologies in problem-solving and solution design for professional practice;

	PO3: develop students' professional practice skills, independent problem-solving skills as well as good communication and teamwork skills required in the planning, development, design, construction, and occupancy stages so that they can work effectively in a multi-disciplinary project; PO4: strengthen students' commitment to understand the importance of ethical and societal considerations, including those related to health, safety and sustainable built environment; and PO5: build up students' leadership skills with national and international visions in their professional surveying career, and lifelong learning attitude.
Programme Intended Learning Outcomes	PLO1: demonstrate an informed understanding of the subjects of surveying, and in the skillful realization of principles, processes and tools necessary for the practice of surveying; PLO2: employ practice and research methodologies to deal with technological and theoretical issues in surveying within a multi-disciplinary environment, and synthesize knowledge and skills for complex and strategic solutions; PLO3: adopt an all-rounded legal, environmental, social and cultural, economic, ethical and technical approach to surveying practice; PLO4A (BS, GP and PD Stream): apply professional knowledge and skills learned to perform the professional roles and tasks within a multi-disciplinary environment, at planning, development, construction and asset management phases of the building life cycle, and demonstrate in-depth understanding of social responsibility for a sustainable future; PLO4B (QS and PFM Stream): apply professional knowledge and skills learned to perform the professional roles and tasks within a multi-disciplinary environment, at pre- and post- construction, and property/facility management phases of the building life cycle, and demonstrate in-depth understanding of social responsibility for a sustainable future; PLO5A (BS, GP and PD Stream): manage the development, construction and asset management projects within a multi-disciplinary environment with professional attitudes, knowledge and skills, as well as competence, effectiveness, and good leadership; PLO5B (QS and PFM Stream): manage the construction cost and property/facility management projects within a multi-disciplinary environment with professional attitudes, knowledge and skills, as well as competence, effectiveness, and good leadership; PLO6: communicate and negotiate effectively with fellow professionals and stakeholders by utilizing verbal and written communication skills, as well as other soft skills; and

	PLO7: formulate a professional development plan for career growth and/or further studies.		
Education Pathways	Graduates of the Programme will have the opportunities to further their studies in taught or research postgraduate programmes on construction project management, housing management, construction law and dispute resolution, international real estate, urban design and regional planning, etc. at local or overseas universities.		
Employment Pathways	Graduates of the Programme will be capable of assuming supervisory and technical duties in the real estate and construction industry in both private and public sectors. Graduates have assumed positions such as building/estate surveying graduates in government departments; management trainee in international property company; development officer and assistant project manager in developers; assistant surveyors, valuers, and project assistants in consultant firms; technical assistant and work supervisors in contracting companies, etc.		
Minimum Admission Requirements	The Programme follows the admission requirements of THEi's Degree Programmes as follows:		
	Standard Entry Route		Non-Standard Entry Route
	Local Qualification	Non-local Qualification	
	<u>HKDSE</u> Level 3 in - Chinese Language - English Language Level 2 in - Mathematics - Liberal Studies 1 Elective Subject or an Applied Learning (ApL) Subject[#] [#] An "Attained" in a relevant ApL subject is regarded as equivalent to an Elective Subject at Level 2. <u>HKALE</u> - Grade E in HKALE (AS-Level) Chinese	<u>Mainland China</u> - A score for admission to Mainland 2nd-tier universities in the National College Entrance Examination (全國普通高等學校統一招生考試) (NCEE) or equivalent; and - A score above 100 out of a maximum of 150 for the English Language <u>International Baccalaureate (IB)</u> - Holder of an International	

	Language & Culture or A-Level Chinese Literature or Grade D in an HKCEE language other than Chinese and English, and • Grade E in HKALE (AS-Level) Use of English; and • Grade E in 1 HKALE A-Level or 2 other AS-Level subjects; and • Grade E / Level 2 in 5 HKCEE subjects, including English Language and Chinese Language	Baccalaureate Diploma; and • One of the following English Language results: - Grade 4 or above in IB English A1 or A2 (Higher or Standard Level); or - Grade 4 or above in IB English B (Higher Level); or - Grade 5 or above in IB English B (Standard Level); or - Grade 4 or above in IB English A: Language and Literature (Higher or Standard Level); or - Grade 4 or above in IB English A: Literature (Higher or Standard Level); or - Grade 4 or above in IB English Literature and Performance (Standard Level). <u>Business and Technology Education Council (BTEC)</u> • Holder of a BTEC Level 3 Diploma of "MM" Grades or a BTEC Level 3 Extended Diploma of "MPP" Grades*; and • Grade C / Grade 4 or above in IGCSE English Language or	
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		English as a Second Language. <i>"M" stands for Merit and "P" stands for Pass</i> <u>Other Non-local Qualifications</u> • Equivalent HKDSE qualifications, achieving a standard of English equivalent to the HKDSE's English Language Level 3	
	Admission into Full-time Year 3 of the Institute's Undergraduate Bachelor's Degree Programmes Applicants with a VTC HD or equivalent sub-degree qualifications/studies in the relevant streams may be admitted into Year 3 of full-time mode of the degree programme, if they pass an interview to assess their suitability.		
Mode(s) of Study and Programme Length	Full-time, 4 years		
Intermediate Exit Award(s)	Title of Qualification: Higher Diploma in Surveying 測量學高級文憑 QF Level: Level 4 QF Credits: 315		
Operator	Technological and Higher Education Institute of Hong Kong, Vocational Training Council (Chai Wan Campus) 133 Shing Tai Road, Chai Wan, Hong Kong		

