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

ACCREDITATION REPORT

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

LEARNING PROGRAMME RE-ACCREDITATION

(I) BACHELOR OF ENGINEERING (HONOURS) IN CIVIL ENGINEERING
(II) PROFESSIONAL DIPLOMA IN BUILDING INFORMATION MODELLING; AND
(III) PROFESSIONAL DIPLOMA IN BUILDING SERVICES ENGINEERING

APRIL 2022

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1. TERMS OF REFERENCE

1.1 Based on the Service Agreement (No.: AA770), the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ), in the capacity of the Accreditation Authority as provided for under the Accreditation of Academic and Vocational Qualifications Ordinance (AAVQO) (Cap. 592), was commissioned by the Technological and Higher Education Institute of Hong Kong, Vocational Training Council (the Operator) to conduct a learning programme re-accreditation (re-LPA) with the following Terms of Reference:

(a) To conduct an accreditation test as provided for in the AAVQO to determine whether the following programmes meet the stated objectives and QF standards and can be continue to be offered as accredited programmes; and

(i) Bachelor of Engineering (Honours) in Civil Engineering;

(ii) Professional Diploma in Building Information Modelling; and

(iii) Professional Diploma in Building Services Engineering.

(b) To issue to the Operator an accreditation report setting out the results of the determination in relation to (a) by HKCAAVQ.

2. HKCAAVQ'S DETERMINATION

2.1 HKCAAVQ has determined that the (i) Bachelor of Engineering (Honours) in Civil Engineering (BECE) programme meets the stated objectives and QF standard at Level 5 and can continue to be offered as an accredited programme with a validity period of five years; (ii) the Professional Diploma in Building Information Modelling (PDBIM) programme of the Operator meets the stated objectives and QF standard at Level 5 and can continue to be offered as an accredited programme with a validity period of three years; and (iii) the Professional Diploma in Building Services Engineering (PDBSE) programme of the Operator meets the stated objectives and QF standard at Level 5 and can continue to be offered as an accredited programme with a validity period of four years.

2.2 **Validity Period**

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

2.3 The determinations on the Programme 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 Engineering (Honours) in Civil Engineering 土木工程（榮譽）工學士	Professional Diploma in Building Information Modelling 建築信息模擬專業文憑	Professional Diploma in Building Services Engineering 屋宇設備工程專業文憑
Title of Qualification(s) [Exit Award(s)]	Bachelor of Engineering (Honours) in Civil Engineering 土木工程（榮譽）工學士	Professional Diploma in Building Information Modelling 建築信息模擬專業文憑	Professional Diploma in Building Services Engineering 屋宇設備工程專業文憑
Primary Area of Study and Training	Engineering and Technology	Architecture and Town Planning	Engineering and Technology
Sub-area (Primary Area of Study and Training)	Civil Engineering	Architecture, Construction and Town Planning	Other Engineering, Related Technology and Services
Other Area of Study and Training	Architecture and Town Planning	Engineering and Technology	Not applicable
Sub-area (Other Area of Study and Training)	Construction Management	Other Engineering Related Technology and Services	Not applicable

Industry	Not applicable	Not applicable	Not applicable
Branch	Not applicable	Not applicable	Not applicable
QF Level	Level 5	Level 5	Level 5
QF Credits	554	72	151
Mode(s) of Delivery and Programme Length	Full-time, 4 years Part-time, 3 years (Year 5 Entry to the 7-year part-time)	Part-time, 12 months	Part-time, 20 months
Intermediate Exit Award(s)	Title of Qualification: Higher Diploma in Civil Engineering 土木工程高級文憑 QF Level: Level 4 QF Credits: 353 Attainment: Completion of 5 semesters in full-time mode or up to 8 years in part-time mode of the Bachelor of Engineering (Honours) in Civil Engineering Programme	Not applicable	Not applicable
Start Date of Validity Period	1 September 2022	1 September 2022	1 September 2022
End Date of Validity Period	31 August 2027	31 August 2025	31 August 2026
Number of Enrolment(s)	One enrolment per year	Three enrolments per year	One enrolment per year
Maximum Number of New Students	Year 1 Entry (F/T) – 105 per year Year 3 Entry (F/T) – 80 per year Year 5 Entry (P/T) – 40 per year	150 per year	50 per year
Specification of Competency Standards-based Programme	☐ Yes	☑ No	

Specification of Generic (Foundation) Competencies-based Programme	☐ Yes ☑ No		
Other Specific Condition(s) of Approval	Not applicable	Not applicable	Not applicable
Notes to be indicated on the QR	Not applicable	Not applicable	Not applicable
Address of Teaching / Training Venue(s)	(1) Technological and Higher Education Institute of Hong Kong (Chai Wan Campus) 133 Shing Tai Road, Chai Wan, Hong Kong (2) Technological and Higher Education Institute of Hong Kong (Tsing Yi Campus) 20A Tsing Yi Road, Tsing Yi, New Territories		

2.4 **Recommendations**

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

<u>For all Programmes</u>

2.4.1 The Operator could develop mechanisms to improve the effectiveness of institution-industry collaboration and engagement through regular and sustainable dialogue with industry partners and employers and therefore providing the means to gather insights and industry intelligence that can be shared for effective programme development and delivery. (Para. 4.1.12)

2.4.2 The Operator should continue to explore all possible means to expand the pool of potential students with effective strategies to promote the Programmes for the benefit of Hong Kong in meeting the market demand for engineering professionals. (Para. 4.2.7)

2.4.3 The Operator should review the existing balance and staffing practices and consider whether part-time staff were appropriately prepared to conduct their teaching, facilitate effective learning and

assessments to assure the continuous improvement of the Programmes. (Para. 4.5.6)

2.4.4 The Operator should monitor the currency and provision of technologies to support learning and ensure they remain appropriate to maintain the delivery and quality of the Programmes. (Para. 4.6.5)

2.4.5 The Operator should continue investment in the development of alumni network. This could include coordinated, structured and regular engagement with alumni to establish how they might contribute to the recruitment, delivery and profiling of the Programmes. (Para. 4.6.6)

2.4.6 The Operator should maintain a clear distinction between seeking advice on quality and governance mechanisms from external examiners through formal quality assurance processes, and committees and seeking views from advisors / industry practitioners. This will ensure that the Programme receives independent feedback and that it fulfils employer needs as reflected in the Programme Objectives and Programme Learning Outcomes. (Para. 4.7.2)

For BECE only

2.4.7 The Operator should carefully consider the detailed quality and selection mechanisms that will need to be established when launching the Work-Integrated Learning module as credit bearing to ensure an equitable learning experience for all students. The Operator should also explore how the receiving industry partners will get development support and training. (Para. 4.3.7)

2.5 **Advice**

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

For all Programmes

2.5.1 The Operator is ***advised*** to take a leading role in establishing a formal network with the construction industries in HK which would raise its professional profile, and, in due course, may lead to increased understanding and public attention for the Programmes. (Para. 4.1.13)

For BECE only

2.5.2 The Operator is ***advised*** to consider how new construction processes like Modular Integrated Construction (MiC), Design for Manufacturing and Assembly (DfMA), etc., might be included in due course and what might be removed from the curriculum to maintain the currency of the Programme without overloading the curriculum. (Para. 4.3.6)

For PDBIM only

2.5.3 The Operator is ***advised*** to explore further BIM applications by initializing cross-discipline fertilization and collaborative projects with other faculties or even linking BIM to games design and gaming technologies. (Para. 4.1.14)

2.5.4 The Operator is ***advised*** to develop international networks with other institutions with BIM expertise to support and maintain curriculum development and ensure the Programme can continue to satisfy the demands of the industry. (Para. 4.1.15)

For PDBSE only

2.5.5 The Operator is ***advised*** to promote the distinctiveness of the Professional Diploma as a recognized qualification for corresponding positions in the BSE Industry through both formal and informal networking and engagement with industry leaders to enhance student enrolment and employability. (Para. 4.1.16)

2.6 HKCAAVQ will subsequently satisfy itself as to whether the Operator remains competent to achieve the relevant objectives and that the Programmes continue to meet the standard to achieve the relevant objectives as claimed by the Operator with reference to, amongst other things, the Operator's fulfilment of any conditions and compliance with any restrictions stipulated in this Accreditation Report. For the avoidance of 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 (THEi) was established in 2011 as a member institution of the Vocational Training Council (VTC). THEi mainly operates local self-financed bachelor degree programmes and was granted Institutional Review status by HKCAAVQ in September 2012. In the 2021/22 academic year, THEi offers 21 bachelor's degree programmes and a number of professional diploma/professional certificate programmes accredited by HKCAAVQ.

3.2 THEi commissioned HKCAAVQ to conduct learning programme re-accreditation of the (i) BECE programme which was accredited firstly in 2011, and re-accredited in 2017, with a validity period of five years from Academic Year (AY 2017/18 to 2021/22; (ii) PDBIM programme which was accredited firstly in 2019, with a validity period of three years from AY2019/20 to 2021/22; and (iii) PDBSE which was accredited firstly in 2017, with a validity period of five years from AY2017/18 to 2021/22.

3.3 HKCAAVQ formed an expert Panel for this exercise (Panel Membership at **Appendix**) 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 video-conferencing on 16 to 18 February 2022 to reduce social contact. HKCAAVQ's *Manual for the Four-stage Quality Assurance Process under the Qualifications Framework (Version 1.2, November 2020)* was the guiding document for the Operator and the Panel in conducting this exercise.

3.4 In consideration of the Operator's track record established from previous accreditation exercises, information on the following aspects of the Programmes was not required in accordance with the Differentiation Approach.

Accreditation Standard	**Information Not Required**
Learning, Teaching and Enabling Resources/Services	Information on institute-wide '*Financial Resources*' is not required. Information on institute-wide "Student Support Services" is not required. Information on institute-wide "Physical Resources" is not required.

4. PANEL'S DELIBERATIONS

The following presents the Panel's deliberations on a range of issues pertinent to its major findings. For aspects of the accreditation standards where no observations are made, they are considered to be appropriately addressed by the Operator.

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.

4.1.1 The BECE programme has been developed in response to the manpower requirements arising from the major infrastructure projects and the aspirations for degree study of secondary school graduates. Graduates from the Programme will be professionally competent as well as socially and globally responsible.

4.1.2 The BECE programme is hosted by the Construction Technology and Engineering cluster of the Faculty of Science and Technology. The Programme Objectives (POs) of the BECE programme are to:

PO1	:	Equip students with a solid foundation in scientific and technical knowledge, which will benefit them throughout their careers;
PO2	:	Build up students' ability to pursue careers as practising civil engineers and to assume professional leadership roles;
PO3	:	Develop students' problem-solving, teamwork, communication, leadership/management skills, and ethical attitudes, which will prepare them for professional practice;
PO4	:	Equip students with an understanding of health, safety, legal, social, cultural, environmental and contemporary issues, and consequent responsibilities relevant to their professional practice; and
PO5	:	Strengthen students' commitment to keep abreast of developments in the profession, and to pursue independent and lifelong learning.

4.1.3 For Programme Learning Outcomes (PLOs), on completion of the Programme, students will be able to:

PLO1 : Apply knowledge of mathematics, science, engineering fundamentals and specialisation to the solution of civil and infrastructure engineering problems;

PLO2 : Identify and analyse routine and abstract engineering problems in civil and infrastructure engineering, reaching substantiated conclusions and formulating evidence-based responses;

PLO3 : Conduct investigations and design solutions for engineering problems in civil and infrastructure engineering, with appropriate consideration for health and safety, cultural, social, and environmental issues;

PLO4 : Evaluate and apply appropriate modern engineering techniques and IT tools to complex engineering activities, with an understanding of the limitations;

PLO5 : Evaluate social, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice based on analysis of the impact of engineering solutions and the need for sustainable development;

PLO6 : Perform civil engineering and management functions effectively in multi-disciplinary settings, with consideration of professional ethics and responsibilities and norms of engineering practice;

PLO7 : Communicate effectively about complex engineering activities with the engineering community and with society at large;

PLO8 : Perform civil engineering and management functions with positive attitude and work effectively as members and leaders in professional teams; and

PLO9 : Reflect on the need for and plan for independent and lifelong learning.

4.1.4 Students of the BECE programme may choose to exit the Programme with an exit award in Higher Diploma in Civil Engineering (HDCE). On completion of the HDCE, students will be able to:

PLO1 : Apply knowledge of mathematics, science, and engineering fundamentals and specialisation to defined civil engineering procedures and problems;

PLO2 : Identify and analyse routine and non-routine problems in civil engineering reaching substantiated conclusions;

PLO3 : Conduct investigations and design solutions for broadly-defined technical problems with appropriate consideration for health and safety, cultural, social, and environmental issues;

PLO4 : Select and apply appropriate modern engineering techniques and IT tools to civil engineering activities, with an understanding of the limitations;

PLO5 : Understand the social, health, safety, legal and cultural issues and the consequent responsibilities relevant to technology practice, based on the impact of engineering solutions and the need for sustainable development;

PLO6 : Perform civil engineering functions effectively in multi-disciplinary settings with understanding of professional ethics and responsibilities and norms of engineering technology practice;

PLO7 : Communicate effectively with the engineering community and society at large about broadly-defined engineering activities;

PLO8 : Understand construction management principles and perform civil engineering functions effectively as members and leaders in technical teams; and

PLO9 : Recognise the need for, and be able to engage in, independent and life-long learning.

4.1.5 The PDBIM programme aims to provide in-depth advanced knowledge of the principles and practices of Building Information Modelling (BIM). It develops students' technical and strategic skills for BIM project planning and implementation in different professional disciplines and technical areas. Graduates of the Programme can apply the BIM approach to designing, analyzing and management building lifecycle.

4.1.6 The PDBIM programme is hosted by the Construction Technology and Engineering cluster of the Faculty of Science and Technology. The POs of the PDBIM programme are:

PO1 : To provide in-depth knowledge of the principles and practice of building information modelling (BIM);

PO2 : To develop technical and strategic skills for BIM project planning and implementation in different professional disciplines and technical areas;

PO3 : To equip students with a solid knowledge and understanding of BIM for lifecycle planning and management of building, construction and infrastructure projects; and

PO4 : To develop students' ability in effective BIM technology applications and innovation at advanced professional level.

4.1.7 For PLOs, on completion of the Programme, students will be able to:

PLO1 : Apply the principles and practice of building information modelling (BIM) in the building and construction industry;

PLO2 : Utilize technical and strategic skills for BIM project planning and implementation in different professional disciplines and technical areas;

PLO3 : Develop BIM solutions for lifecycle planning and management of building, construction and infrastructure projects; and

PLO4 : Demonstrate the ability in effective BIM technology applications and innovation at advanced professional level.

4.1.8 The PDBSE programme aims to nurture students with a solid understanding and foundation in both practical and theoretical knowledge so that they can fulfil the manpower needs of the Building Services Engineering (BSE) industry in Hong Kong. Graduates of the Programme will be capable of assuming duties in any sectors of the building service industry to provide consultancy, contracting, operation and maintenance, research and technical support.

4.1.9 The PDBSE programme is hosted by the Construction Technology and Engineering cluster of the Faculty of Science and Technology. The POs of the PDBSE programme are to:

PO1 : Equip students with a solid knowledge and understanding of the theories, methods and practices of building services engineering that will prepare them for their careers in the building services industry;

PO2 : Provide students with the engineering knowledge and technical skills in the design, installation, commissioning, and operation of building service systems for buildings in the HKSAR;

PO3 : Develop students' ability in professional practice, where a combination of engineering, management, communication, leadership, teamwork and other skills are required for solving engineering problems in building services;

PO4 : Develop students' ability to appreciate how environmental aspects, technical and other factors influence various building services and engineering issues; and

PO5 : Strengthen students' commitment to protect the environment and keep abreast of developments in the profession.

4.1.10 For PLOs, on completion of the Programme, students will be able to:

PLO1 : Apply knowledge and understanding of fundamental mathematics, computing, economics, science and engineering principles that underpin the study of building services engineering;

PLO2 : Utilise appropriate knowledge, skills and techniques to design, analyse, install, commission and maintain building services engineering works in familiar and unfamiliar contexts;

PLO3 : Solve building services related problems using appropriate engineering and economic principles, and designing systems/products/procedures to meet defined needs, taking into account practical constraints and non-routine requirements;

PLO4 : Evaluate building services engineering and management solutions with respect to environmental aspects, technical and other considerations;

PLO5 : Explain contemporary building services engineering issues, knowledge of relevant career fields and their practices, concerns and development;

PLO6 : Search and synthesise information, collect and analyse data organise and present ideas, and plan and execute projects; and

PLO7 : Communicate effectively in various media, work effectively within a team, learn independently, manage self effectively, and care for the environment.

4.1.11 The Operator provided the following regarding the POs and PLOs of the Programmes:

(a) Tables showing the mapping of the PLOs to the POs;

(b) Tables showing the mapping of the PLOs to the Generic Level Descriptors (GLD) at QF Level 4 (for HDCE) and QF Level 5;

(c) Tables showing the mapping of the modules to the PLOs;

(d) Tables showing the mapping of the Industry/Professional-Specific (IPS) modules to the Generic Level Descriptors (GLD) at QF Level 4 and 5;

(e) Samples of marked assessments together with assessment rubrics;

(f) Samples Final Projects/ Capstone Projects / Industry-based Student Projects;

(g) Summary of Student Feedback Questionnaire (SFQ);

(h) External Examiners' reports from AY2017/18 to AY2020/21 for BECE; AY2020/21 for PDBIM; and AY2017/18 to AY2019/20 for PDBSE; and

(i) Annual Programme Review and Improvement (APRI) Reports.

For all Programmes

4.1.12 The Panel noted and commended the Operator's relationships with the construction industries as an invaluable asset and that provided a distinctive element to the Programmes offered. However, from meetings with various representatives from the Operator and external stakeholders, it was clear that interactions and communication between the Operator and the construction industries tended to be unilateral and developed at an individual level. The Panel ***recommended*** that the Operator could develop mechanisms to improve the effectiveness of institution-industry collaboration and engagement through regular and sustainable dialogue with industry partners and employers and therefore providing the means to gather insights and industry intelligence that can be shared for effective programme development and delivery.

4.1.13 Through building the mechanisms for networking with the industry partners and employers, and developing short/online courses to support professional training and development, the Operator could acquire considerable international construction intelligence to assist with programme development. The networking plan could also assist in improving market visibility of the Programmes. The Operator is ***advised*** to take a leading role in establishing a formal network with the construction industries in HK which would raise its professional profile, and, in due course, may lead to increased understanding and public attention for the Programmes.

For PDBIM only

4.1.14 From the submission documents and meeting with representatives from Operator, the Panel noted and recognized the efforts and achievements in promoting the use of BIM for the construction and engineering industries. The emergence of BIM technologies and the wide adoption of BIM has the potential to be extended far beyond its deployment in the Architecture, Engineering and Construction (AEC) Industries. The Operator is ***advised*** to explore further BIM applications by initializing cross-discipline fertilization and collaborative projects with other faculties or even linking BIM to games design and gaming technologies.

4.1.15 The Panel noted the increased adoption and requirement for Building Information Modelling (BIM) in the AEC Industry. Following the meetings with representatives from the Operator and with external stakeholders, it was evident that the Operator had successfully engaged these industries in designing a comprehensive BIM programme. It is evident that BIM provides new technological opportunities and is revolutionizing the construction industry and the Panel noted that different operators were exploring a range of approaches and methodologies to teaching BIM and benefitting the industry and it was important for the Operator to be cognizant of these. To continue the advancement of BIM the Operator is ***advised*** to develop international networks with other institutions with BIM expertise to support and maintain curriculum development and ensure the Programme can continue to satisfy the demands of the industry.

For PDBSE only

4.1.16 The Panel raised some concerns over the use of "Professional Diploma" as an award title for the Programme rather than adopting the more commonly adopted entry requirements of "Higher Diploma" or "Diploma" for graduates joining the building services engineering industries. This may impact on both the potential recruitment and enrollment of students to the Programme and the recognition of the Professional Diploma in future employment. Following the meetings with representatives of the Operator, the Panel noted the rationale provided but considered that there was the need to keep the construction industries informed and up-to-date regarding the positioning and distinctiveness of the Programme. The Operator is ***advised*** to promote the distinctiveness of the Professional Diploma as a recognized qualification for corresponding positions in the BSE Industry through both formal and informal networking and engagement with industry leaders to enhance student enrolment and employability.

4.1.17 After reviewing the above information, in light of the above observations and comments, the Panel formed the view that the PLOs reflected the stated POs and appropriately pitched at QF Level 5.

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.

4.2.1 The Panel learnt that admission is on a competitive basis, with applicants judged on their ability to meet the General Entrance Requirements (GERs) and the programme-specific entrance requirements, if any. Other details of the admission requirements are provided in the Institute's Academic Policies and Regulations (AP&R) for Degree Programmes and the Institute's Academic Policies and Regulations for Non-degree Programme.

4.2.2 For BECE programme, the admission requirements,

(a) for Year-1 entry and Advanced Standing entry of THEi's degree programmes are provided below;

Minimum General Entrance Requirements		
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. A maximum of two ApL subjects (excluding ApL(c)) will be considered in admission selection*	<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: Literature (Higher or Standard Level); or - Grade 4 or above in IB English Literature and Performance (Standard Level).	To be determined by the Faculty Dean on a case-by-case basis

<table>
<tr>
<td>HKALE
• 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 other 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 [HKCEE English Language taken in 2006 or before should be at Grade E in Syllabus B / Grace C in Syllabus A].</td>
<td>Business and Technology Education Council (BTEC)
• Holder of a BTEC Level 3 Diploma of “MM” Grades or a BTEC Level 3 Extended Diploma of “MPP” Grade (“M” stands for Merit and “P” stands for Pass); and
• One of the following English Language requirements:
- Grade E in GCE (A-Level / AS-Level) English Language; or
- Grade C / Grade 4 in GCSE / IGCSE / GCE (O-Level) English Language; or
- Grade E in HKALE (AS-Level) Use of English; or
- A score of 100 out of a maximum of 150 for the English language subject of NCEE or equivalent; or
- An overall score of 6.0 in IELTS; or
- A score of 79 (internet-based test) or 213 (computer-based test) or 550 (paper-based test) in Test of English as a Foreign Language (TOEFL); or
- Grade 4 or above IB Higher-level English Language (Syllabus B) / Grade 4 in Standard-/Higher-Level English Language (Syllabus A) / Language and Literature (Syllabus A) / Literature (Syllabus A) / Grade 4 or above in Standard-Level English Literature and Performance / Grade 5 or above in Standard-level English Language (Syllabus B); or
- Have obtained an equivalent qualification to HKDSE’s English Language Level 3

Other Non-local Qualifications
• Equivalent HKDSE qualifications, achieving a standard of English equivalent to the HKDSE’s English Language Level 3</td>
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<tr>
<td colspan="3">Admission into Year 3 (full-time) of the Institute’s Undergraduate Bachelor’s Degree Programmes</td>
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<tr>
<td colspan="3">Normally, 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.</td>
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(b) There are programme-specific entrance requirements for the Programme. They are:

- If the elective subject is not Physics / Chemistry / Biology / Combined or Integrated Science, then Mathematics Extended Part (Module 1 or 2) must be at Level 2 or above; OR Equivalent;

- A maximum of two Applied Learning (ApL) subjects can be counted for admission purpose. Relevant ApL subjects include: Automotive Technology, Aviation Studies, Building Facilities Engineering, Building Technology.

(c) All applicants via Advanced Standing Entry, except VTC Higher Diploma graduates in a relevant area of study who apply via the Through-Train entry route, are required to attend an admission interview to assess their suitability. All interviews are conducted in English.

4.2.3 For PDBIM programme, the minimum entry requirement is,

(a) a Higher Diploma (HD) or Associate Degree (AD) in construction or engineering related disciplines, or

(b) a bachelor's degree in other disciplines with relevant working experience, or

(c) a Professional Diploma (PD) or Professional Certificate (PC) in Building Information Modelling at QF Level 4 with four years relevant working experience that is deemed acceptable to the FB; AND a pass in an entrance assessment, which can be either oral or written.

4.2.4 For PDBSE programme, the minimum entry requirement is,

(a) VTC's Professional Diploma in relevant disciplines at QF Level 4, or Higher Diploma or equivalent qualifications in a relevant area of study such as building services engineering; OR

(b) graduates with a Professional Diploma, a Higher Diploma or an Associate Degree in other engineering or science programmes or equivalent will be considered for admission on a case-by-case basis, and their suitability will be evaluated by the Programme Team.

4.2.5 For PDBIM and PDBSE, mature students at the age of 25 or above with at least three years of relevant experience may be considered for admission. The shortlisted mature PDBIM applicants may be required / PDBSE applicants are required to attend an interview that assesses their suitbility.

4.2.6 The proposed maximum number of new students of the Programmes are as follows:

(a) For BECE programme;

AY Entry	Mode	2022/23	2023/24	2024/25	2025/26	2026/27
Year 1	FT	105	105	105	105	105
Advanced Standing*	FT (Year 3 entry)	80	80	80	80	80
	PT (Year 5 entry)	40	40	40	40	40

*Advanced Standing for admission of relevant HD qualification entry to Year 3 of the 4-year FT mode and Year 5 of the 7-year PT mode

(b) For PDBIM programme; and

Academic Year	2022/23	2023/24	2024/25	2025/26	2026/27
Maximum	150*	150*	150*	150*	150*

*The 150 Maximum Places are for three planned intakes.

(c) For PDBSE programme,

Academic Year	2022/23	2023/24	2024/25	2025/26	2026/27
Maximum	50	50	50	50	50

<u>For all Programmes</u>

4.2.7 From the submission provided by the Operator, there is clear evidence of the strong market demand for engineering professionals in Hong Kong. However, student enrolment figures did not reflect that market demand. Following the meetings with different representatives from the Operator, the Panel agreed that the student enrolment figures over the past two years did not reflect the efforts invested due to the social unrest and the pandemic. The Panel was also informed that a special committee had been established by the Operator to review recruitment and consider how to effectively reach

the market. The Panel ***recommended*** that the Operator should continue to explore all possible means to expand the pool of potential students with effective strategies to promote the Programmes for the benefit of Hong Kong in meeting the market demand for engineering professionals.

4.2.8 With regard to financial sustainability, the Panel was provided with the Income and Expenditure Statements for 2019/20 to 2020/21 and projected Income and Expenditure Statements for 2021/22 to 2025-26. The breakeven student numbers were noted.

4.2.9 Based upon the industry needs, staffing and teaching facilities, notwithstanding the above recommendation, the Panel considered that the proposed maximum number of new students, the minimum admission requirements and the student selection process are appropriate.

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.

4.3.1 The BECE programme is a 4-year full-time bachelor degree programme which also offers part-time mode of study. Students are required to complete a minimum of 43 modules and 132 Credit Points (CPs), together with two Work-Integrated Learning (WIL) modules to be qualified for the award. The Programme comprises two main curriculum components, namely the General Education (GE) curriculum delivered through the GE modules and the vocational curriculum delivered through the Industry/Profession-Specific (IPS) modules.

(a) The distribution and CPs by module type and Qualifications Framework (QF) level is provided below.

Module Type		Year 1 & 2 CP		Year 3 & 4 CP		No. of Modules	Total Institute CP	
		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 Core	36	15	-	36	28	87	72.7
	Programme Elective	-	-	-	9	3	9	
	Work-Integrated Learning	Nil*	-	Nil*	-	2	0	
Total		69 (52.3%)		63 (47.7%)		45	132^	
Total Number of QF Credits							554^	

** Work-Integrated Learning (WIL) modules carries no CP*

^ One Institute CP is equivalent to 4.2 QF credits

(b) For HDCE, the distribution and CPs by module type and Qualifications Framework (QF) level is provided below.

Module Type		Year 1 & 2 CP		Summer Semester of Year 2 CP		No. of Modules	Total CP	
		QF-L4	QF-L5	QF-L4	QF-L5		No.	%
General Education (GE) Modules	GE Core (English)	3	3	Nil*	-	3	6	21.4 %
	GE Core (Chinese)	3	-	-	-	1	3	
	GE Core	6	-	-	-	2	6	
	GE Elective	-	3	-	-	1	3	
Industry/ Profession Specific (IPS) Modules	Programme Core	36	15	9	-	19	60	78.6 %
	Programme Elective	-	-	6	-	2	6	
	Work-Integrated Learning	Nil*	-	-	-	1	Nil*	
Total:		69 (82.1%)		15 (17.9%)		28	84^	
Total Number of QF Credits (HD Award)							353^	

** Work-Integrated Learning (WIL) module Safety, Health and Industrial Training and E-Learning Package: English for Workplace Communication carries no CP*

^ One Institute CP is equivalent to 4.2 QF credits

4.3.2 The PDBIM is a one-year part-time programme and comprises a total of 72 QF credits at Level 5. The Programme consists of five technical modules (three cores and two electives) and one Capstone Project with a programme length of three semesters in one year, up to a maximum of three years for the part-time study mode. The structure of the PDBIM is provided below.

Theme	Module Title	Module Type	QF Level	QF Credit	Contact Hours
BIM Principles & Practices	BIM Technology	Core	5	12	42
	BIM in Practice	Core	5	12	42
BIM Skills & Applications	BIM Visualisation & 3D Modelling	Elective*	5	12	42
	BIM for Cost & Facility Management	Elective*	5	12	42
	BIM for MEP & Sustainable Building	Elective*	5	12	42
BIM Implementation & Capstone	BIM Project Execution & Management	Core	5	12	42
	Capstone Project	Core	5	12	42
			Total 6 modules	72	252

**Each student should select two out of the three elective modules.*

4.3.3 The PDBSE is a 20-month part-time programme, comprises a total of 151 QF credits at Level 5. The organisation of the IPS modules progresses through different levels from fundamental studies in the first semester to professional development in later semesters. The structure of the PDBIM is provided below.

Semester	Module Title	QF Level	QF Credit	Contact Hours
Sem 1	Electrical Services Fundamental	4	12.6	42
	English for Academic Studies 1	4	12.6	42
	Advanced Engineering Mathematics	5	12.6	42
Sem 2	HVACR Technology	5	12.6	42
	Piped Services	5	12.6	42
	Fire Services	5	12.6	42
Sem 3	Advanced Electrical Installations	5	12.6	42
Sem 4	Building Services System Design	5	12.6	42
	Project Management	5	12.6	42
	Indoor Environment Engineering	5	12.6	42
Sem 5	Industry-based Student Project	5	25.2	84
	Professional Development (non-credit-bearing)	--	--	--
Total			151	504

4.3.4 The Panel reviewed the module syllabi and sample teaching materials of the Programmes and made the following observations about the programme contents:

(a) Alignment between the GLD at QF Level 5 and PLOs is illustrated with mappings.

(b) Alignment between PLOs and module learning outcomes (MLOs) is illustrated through module syllabi and sample teaching materials.

4.3.5 The Panel noted that there is a change of QF credits for the intermediate exit award of the BECE programme from 337 to 353. After seeking clarification from the Operator with approval record provided, it was learnt that the revised QF credits of HD exit award was based on a change of calculation method without any change in substance.

<u>For BECE only</u>

4.3.6 In meeting the representatives of the Operator and from the written submission, the Panel noted that the Programme would need to continue to incorporate new elements and emerging skills within the curriculum, particularly in response to technological advancement and changes in the construction process. The Panel noted the requirement to sustain the currency of the Programme and that it was important to consider how new construction processes like Modular Integrated Construction (MiC) and Design for Manufacturing and Assembly (DfMA), etc., might be included in due course and what might be removed from the curriculum as a consequence. The Operator is ***advised*** to consider how new construction processes like Modular Integrated Construction (MiC), Design for Manufacturing and Assembly (DfMA), etc., might be included in due course and what might be removed from the curriculum to maintain the currency of the Programme without overloading the curriculum.

4.3.7 The Panel noted the WIL module is currently a mandatory one that provides students with opportunities to identify civil engineering problems and solutions in an authentic and relevant work-based environment where the knowledge and skills learned can be developed through practice. The module was generally well-received by students. It reflected and reinforced the practical and professional

approach of the Programme. The Operator outlined their plans to make the WIL module a credit-bearing one and the Panel noted potential challenges particularly related to quality assurance and equality of opportunity in managing and ensuring that all students can access comparable learning experience irrespective of their GPA. The Panel ***recommended*** that the Operator should carefully consider the detailed quality and selection mechanisms that will need to be established when launching the Work-Integrated Learning module as credit bearing to ensure an equitable learning experience for all students. The Operator should also explore how the receiving industry partners will receive development support and training.

4.3.8 Notwithstanding the above recommendation and advice, the Panel was of the view that the content and structure of the Programmes are coherent and effective in enabling students to achieve the stated programme learning outcomes and the required standards at QF Level 5.

4.4 Learning, Teaching 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.

4.4.1 For the BECE programme, learning and teaching methods for the IPS modules include lectures, tutorials, workshops, laboratory activities and fieldworks. Students will also be engaged in other learning and teaching activities which include field visits and studies, industrial attachment, etc. The learning and teaching methods used in different modules of the Programme in AY 2021/22 are summarized below.

Year	Module Title	QF Level	Lecture	Tutorial	Workshop/Laboratory /Site Visits	ndent Learning Hours	Assessment Hours	nal Learning Hours
1	English for Academic Studies 1	4	0	42	0	84	0	126
	Chinese 1	4	0	30	12	82.5	1.5	126
	Creativity & Innovation in Society	4	14	28	0	84	0	126
	Computer Programming	4	21	0	24	78	3	126
	Engineering Physics	4	28	14	6	75	3	126
	Calculus	4	28	21	0	74	3	126
	Structural Mechanics	4	28	14	6	75	3	126
	Matrix Algebra & Statistics	4	21	14	14	74	3	126
	Engineering Surveying	4	14	0	28	81	3	126
	Mechanics of Materials	4	28	14	10	71	3	126
	Construction Materials	4	28	14	7	74	3	126
	Safety, Health & Industrial Training	4	See Note 1 below					
2	Technology, Society & Work	4	14	28	0	84	0	126
	Entrepreneurial Mindset	4	14	28	0	84	0	126
	GE Elective 1	5	Depending on selected module					126
	Civil Engineering Construction	4	28	14	0	81	3	126
	Engineering Geology & Soil Mechanics	4	28	14	6	75	3	126
	Contract Administration & Measurement	4	28	14	0	81	3	126
	Advanced Engineering Mathematics	5	28	14	4	77	3	126
	Theory of Structures 1	5	28	14	6	75	3	126
	Fluid Mechanics	4	28	14	6	75	3	126
	Design of Structures 1	5	28	14	6	75	3	126
	Environmental Engineering	5	28	14	6	75	3	126
	Construction Management	5	28	14	0	81	3	126
3	English for Academic Studies 2	5	0	36	6	84	0	126
	English for Professional Purposes	5	0	36	6	84	0	126
	Chinese 2	5	0	36	6	84	0	126
	GE Elective 2	5	Depending on selected module					126
	GE Elective 3	5	Depending on selected module					126
	Highway Engineering	5	28	14	6	75	3	126
	Theory of Structures 2	5	28	14	6	75	3	126
	Geotechnical and Foundation Engineering	5	28	14	6	75	3	126
	Design of Structures 2	5	28	14	10	71	3	126
	Transportation Engineering	5	28	14	6	75	3	126
	Project Management	5	28	14[3]		81	3	126
	Industrial Attachment	4	See Note 2 below					

Year	Module Title	QF Level	Lecture	Tutorial	Workshop/Laboratory /Site Visits	ndent Learning Hours	Assessment Hours	nal Learning Hours
4	GE Elective 4	5	Depending on selected module					126
	Earthwork Engineering	5	28	14	6	75	3	126
	Sustainability & Infrastructure Design	5	28	14[3]		84	0	126
	Engineers in Society	5	28	14	0	84	0	126
	Final Year Project 1	5	0	42[3]		84	0	126
	Final Year Project 2	5	0	84[3]		168	0	252
	Programme Elective 1	5	Depending on selected module					126
	Programme Elective 2	5	Depending on selected module					126
	Programme Elective 3	5	Depending on selected module					126
Programme Elective Modules	Computational & Engineering Analysis	5	28	14	6	75	3	126
	Engineering Risk, Reliability & Decision	5	28	14[3]		81	3	126
	Advanced Construction Materials & Technology	5	28	14	0	81	3	126
	Prestressed Concrete & Water Retaining Structures	5	28	14	6	75	3	126
	Geotechnical Engineering Practice	5	28	14	6	75	3	126
	Hydraulics & Hydrology	5	28	14	6	75	3	126
	Design of Transport Infrastructure	5	28	14	0	81	3	126
	Infrastructure Planning & Evaluation	5	28	14	0	81	3	126
	Principles of Project Finance	5	28	14	0	84	0	126
	Construction Law & Practice	5	28	14	0	81	3	126
	Biological Wastewater Engineering	5	28	14	12	69	3	126
	Integrated Solid Waste Management	5	28	14	8	73	3	126
	Environmental Impact Assessment	5	28	14	10	74	0	126
	Bridge Engineering	5	28	14	6	75	3	126
	Seismic Resistant Design of Building Structures	5	28	14	6	75	3	126
	Introduction to Wind Engineering	5	28	14	0	81	3	126
	Introdcution to Tunnel Engineering	5	28	14	0	81	3	126
	Financial Management in Civil Engineering	5	28	14	0	81	3	126

Notes

1: The *Safety, Health & Industrial Training* module includes a 2-week industrial training programme comprising at least 10 hours of lecture, 10 hours of tutorial and working group, 7 hours of safety card training and 30 hours of first aid training.

2: The *Industrial Attachment* module includes a 3-month industrial attachment with at least 4 hours of review consultation/interview.

3: The arrangement of class contact hours with tutorials and workshops for these modules is non- restrictive

4.4.2 For the PDBIM programme, learning and teaching methods for the modules include lectures, tutorials, practical laboratory sessions, and web-based learning platform to facilitate interactive learning and teaching. The learning and teaching methods used in different modules of the Programme in AY 2021/22 are summarized below.

Module Title	Module Type	QF Level	Component and Learning Hours					Notional Learning Hours (NLHs)	QF Credit
			Lecture / Seminar	Tutaorial	Practical / Project	Self-Study	Assessment		
BIM Technology	Core	5	28	14	0	75	3	120	12
BIM in Practice	Core	5	28	14	0	75	3	120	12
BIM Visualisation & 3D Modelling	Elective*	5	20	10	12	75	3	120	12
BIM for Cost and Facility Management	Elective*	5	20	10	12	75	3	120	12
BIM for MEP & Sustainable Building	Elective*	5	20	10	12	75	3	120	12
BIM Project Execution & Management	Core	5	24	12	6	78	0	120	12
Capstone Project	Core	5	0	0	42	78	0	120	12
							Total 6 Modules	720	72

4.4.3 For the PDBSE programme, learning and teaching methods for the IPS modules include lectures, tutorials, workshops, laboratory sessions and a web-based platform to facilitate interactive learning and teaching. The learning and teaching methods used in different modules of the Programme in AY 2021/22 are summarized below.

Module Title	Component and Learning Hours						Notional Learning Hours (NLHs)	QF Credit
	QF Level	Lecture	Tutorial	Practical / Project	Self-Study	Assessment		
Electrical Services Fundamental	4	28	8	6	81	3	126	12.6
English for Academic Studies 1	4	-	30	12	84	-	126	12.6
Advanced Engineering Mathematics	5	28	8	6	81	3	126	12.6
HVACR Technology	5	28	8	6	81	3	126	12.6
Piped Services	5	28	8	6	81	3	126	12.6
Fire Services	5	28	8	6	81	3	126	12.6
Advanced Electrical Installations	5	28	8	6	81	3	126	12.6
Indoor Environment Engineering	5	28	8	6	81	3	126	12.6
Building Services System Design	5	12	24	6	84	-	126	12.6
Project Management	5	28	8	6	84	-	126	12.6
Industry-based Student Project	5	-	-	84	168	-	252	25.2
Professional Development	Not Applicable (non-credit-bearing)							
						Total:	1512	151

4.4.4 Learning and teaching methods for the modules include a combination of lectures, tutorials, laboratory sessions, project-based learning, e-platform learning, Work-Integrated Learning (WIL), etc. Where appropriate, guest speakers from across the construction industry professions are invited to share their experience with students.

4.4.5 The Operator's assessment policy specifies its philosophy and the general principles that guide its assessment practices. The assessment methods of each module and contribution of each assessment item to the overall module evaluation provided include a combination of assignments, in-class activities, tests and quizzes, projects/mini projects, and/or examinations.

4.4.6 The Panel noted that the method of assessment for each module is formulated in line with the aims and objectives of the respective module. The assessment method and weighting assigned to each

assessment component are set out clearly and appropriately in the module syllabi.

4.4.7 The Panel reviewed the sample assignment materials as provided. The Panel considered that the assessment requirements demonstrate alignment to the MLOs and the standard of QF Level 5 that requires students to be able to analyse professional problems, exercise appropriate judgement and perform tasks involving planning and design.

4.4.8 The Panel learnt from the accreditation documents of the graduation requirements of the Programmes the following:

(a) For BECE, the graduation requirement for the Programme is an achievement of 132 Institute Credit Points (CPs) by passing all compulsory (core) and required elective modules, in addition to completing the non-credit bearing modules of Work Integrated learning (for degree and HD) and E-Learning Package: English for Workplace Communication (for HD only).

(b) For PDBIM, the graduation requirement for the Programme is an achievement of 72 QF credits. For modules with no end-of-semester examinations, they are assessed through students' performance in the required module assessment components.

(c) For PDBSE, the graduation requirement for the Programme is an achievement of 151 QF credits and a Pass in the Professional Development module. For modules with no end-of-semester examinations, they are assessed through students' performance in the required module assessment components.

4.4.9 The Panel reviewed the following documents and formed the view that the assessment methods in enabling students to demonstrate the learning outcomes at the required standards are effectiveness.

(a) Award classification and grade distribution;

(b) Students' feedback;

(c) Comments from the professional body (BECE only); and

(d) Comments from the External Examiners (EEs).

4.4.10 In view of the above information, the Panel considered that the learning, teaching and assessment activities in delivering the programme learning outcomes and programme content are appropriate for engaging students in the learning process and enabling students to demonstrate the attainment of PLOs at the required standard at QF Level 5.

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 are kept updated for the quality delivery of the programme.

Staffing

4.5.1 Each Programme is led by a Programme Leader who is the academic leader of the Programme and responsible for the Programme's day-to-day operation, quality assurance and improvement, and reports to the Dean of the Faculty for its quality, as indicated by student evaluations, enrolment and completion rates and graduate outcomes. The Programme Leader provides academic and organisational leadership for the Programme, and works with the Module Convenors and teaching staff and Year Tutors.

4.5.2 The highest academic qualifications and number of academic staff of the Programmes are as follows:

(a) BECE programme;

Highest Academic Qualifications	No. of Staff for the Programme (%)
Doctoral degree	Full-time: 9 (37.5%) Part-time: 4 (16.7%)
Master's degree	Full-time: 2 (8.3%) Part-time: 9 (37.5%)
Total number of staff	24 (11 full-time + 13 part-time)

(b) PDBIM programme; and

Highest Academic Qualifications	No. of Staff for the Programme (%)
Doctoral degree	Full-time: 1 (14.3%) Part-time: 0 (0.0%)
Master's degree	Full-time: 0 (0.0%) Part-time: 5 (71.4%)
Bachelor's degree	Full-time: 0 (0.0%) Part-time: 1 (14.3%)
Total number of staff	7 (1 full-time + 6 part-time)

(c) PDBSE programme

Highest Academic Qualifications	No. of Staff for the Programme (%)
Doctoral degree	Full-time: 2 (40%) Part-time: 0 (0%)
Master's degree	Full-time: 3 (60%) Part-time: 5 (100%)
Total number of staff	10 (5 full-time + 5 part-time)

4.5.3 Module Convenors are responsible for the day-to-day operation of the modules and play a leading role in organising the learning and teaching activities. Assisted by other teaching staff, the Module Convenors take charge of the running of tutorials, workshops or laboratory sessions. Under the academic and organisational leadership of the Programme Leader, the Module Convenors and other teaching staff will work as a team to support the delivery of the programme.

4.5.4 For the PDBIM programme, the Panel learnt that there will be three enrolments per year and all modules will be delivered three times per year as they are delivered sequentially for each cohort. This will facilitate a logical and systematic development of the knowledge and skills of BIM for the students even though they come in at different times. The Panel also raised the concern for the workload of teaching staff. In the meeting with the Programme Team, the Panel was informed that only two enrolments were delivered in AY2020/21 and AY2021/22 respectively and assured the Panel that the teaching team will have the capacity to meet the demand even if the maximum number of students were enrolled

Staff Development

4.5.5 The Panel learnt that the staff development policies are to enhance staff knowledge, skills, and attitude and to prepare them for their roles. All teaching staff of the Programmes are required to remain current and ensure they are kept updated for programme delivery, with an adequate staff development policy and activities with respect to both pedagogical and professional development. The lists of staff development activities in both professional and pedagogical areas were provided.

For all Programmes

4.5.6 The Panel noted that the deployment of part-time staff played a vital role in the delivery of Programme. Most of them are industry practitioners and potential employers able to bring industry expertise and enrich the teaching with industry insights and skills and how these are applied in a professional context. The Panel raised some concerns over the balance of full and part-time staff and the impact on the overall quality of the Programmes, and particularly the suitability of the pedagogies adopted, where these staff do not have the equivalent time and teaching experience of the full-time staff. Following the meetings with representatives from the management and the staff, the Panel was informed of the existing mechanisms and provision of support for part-time teaching staff. The Panel ***recommended*** that the Operator should review the existing balance and staffing practices and consider whether part-time staff were appropriately prepared to conduct their teaching, facilitate effective learning and assessments to assure the continuous improvement of the Programmes.

4.5.7 After considering the above information and discussion with the management as well as the programme team, notwithstanding the recommendation, the Panel considered that the Operator has a clear staffing policy in place to ensure adequate qualified teaching and support staff for the delivery and management of the Programmes. THEi also has an established system to provide professional development opportunities. The Panel considered that there are adequate and qualified teaching staff for the quality delivery of the Programmes.

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.

Financial Resources

4.6.1 Resources allocation for the programmes offered by the Faculty of Science and Technology (FST), including the BECE, PDBIM and PDBSE programmes, are included in the Faculty's annual academic plan. The academic plan will firstly be discussed at the Academic Board (AB). Its recommendations will then be forwarded to the Institute Council (IC) for discussion and decision to ensure that the Institute has the capacity and resources to support the learning programmes.

Physical Resources

4.6.2 The provision of learning resources and facilities for the Programme are based on the approved maximum yearly intake, the Faculty's annual programme plan and the actual number of enrolment. The income and expenditure statements of the Programmes were provided.

4.6.3 There are two campuses that provide the learning environment for THEi's students namely, the Tsing Yi Campus and the Chai Wan Campus. The FST is based in the Tsing Yi Campus where the Programmes have been run since their launch in AY2012/13 (BECE); AY2020/21 (PDBIM) and AY2017/18 (PDBSE).

4.6.4 Specialised facilities supporting the delivery of the Programmes include the laboratory facilities in the Tsing Yi Campus and in the IVE (Tsing Yi) Campus. A list of specialised facilities and equipment for the Programmes, and their associated utilisation rates were provided for Panel's review.

For all Programmes

4.6.5 The Panel met with the representatives of current students and graduates who were satisfied with the quality and quantity of the programme specific facilities. However, the Panel noted that the current provision is not currently operating at full capacity. Given the

Operator's plans to increase in student enrolment and with rapidly changing technologies and applications within the industry, the Panel ***recommended*** the Operator should monitor the currency and provision of technologies to support learning and ensure they remain appropriate to maintain the delivery and quality of the Programmes.

4.6.6 As graduates from the Programmes enter the AEC Industries the Operator could potentially benefit from their insights, reflections, experience in industry and their advocacy over time. Following discussions with representatives, students and graduates from the Operator, the Panel ***recommended*** the Operator should continue investment in the development of alumni network. This could include coordinated, structured and regular engagement with alumni to establish how they might contribute to the recruitment, delivery and profiling of the Programmes.

4.6.7 Based on the above information, the Panel had the view that the provision of learning, teaching and enabling resources by the Operator for the Programmes are adequate and appropriate. There are also adequate financial and physical resources to support 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.

4.7.1 The Operator provided the following in regard to the development, monitoring and reviewing of the Programme for the Panel to review:

(a) *THEi Quality Assurance Manual;*

(b) *Summary of Student Feedback Questionnaire survey of the Programmes*;

(c) External Examiners' Reports

(d) Annual Programme Review and Improvement (APRI) Reports

(e) Periodic Programme Review (PPR) Reports; and

(f) Records of approval of the BECE programme by Institute Council;

(g) Sample of Faculty Board's paper and minutes about Minor changes to the Programmes (BECE and PDBIM); and

(h) Record of Endorsement from Faculty Board, Academic Board and Approval from Institute Council's about Substantial Change to the Programme (PDBSE).

For all Programmes

4.7.2 During the meeting with external stakeholders, the Panel noted that the external stakeholders had been consulted in their multiple roles as both external examiners and advisors / industry practitioners, particularly for the PDBSE programme. While they had been very supportive of the Programmes and clearly made considerable contributions to its delivery, the Operator should be aware that views and perspectives given by external examiners for quality and governance mechanisms should be independent of those from advisors / industry practitioners. As such, the Panel ***recommended*** that the Operator should maintain a clear distinction between seeking advice on quality and governance mechanisms from external examiners through formal quality assurance processes, and committees and seeking views from advisors / industry practitioners. This will ensure that the Programme receives independent feedback and that it fulfils employer needs as reflected in the Programme Objectives and Programme Learning Outcomes.

4.7.3 In view of the above, notwithstanding the above recommendation, the Panel considered that the Operator had monitored and reviewed the development and performance of the Programmes on an on-going basis to ensure quality assurance mechanisms are in place to approve, monitor and review the quality and currency of the Programmes.

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 meets 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 programme 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 arises 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 http://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: 72/40/02
29 April 2022
JoH/AnC/WmW/jnl

Appendix

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

Learning Programme Re-accreditation for
(i) Bachelor of Engineering (Honours) in Civil Engineering
(ii) Professional Diploma in Building Information Modelling
(iii) Professional Diploma in Building Services Engineering

15-18 February 2022

Potential Panel Membership

Panel Chair

Professor Anne BODDINGTON
Professor Emerita
Design Innovation
Kingston University London
THE UNITED KINGDOM

**** Panel Secretary**

Mr WM WONG
Registrar
Academic Accreditation and Assessment
Hong Kong Council for Accreditation of Academic and Vocational Qualifications
HONG KONG

Panel Members

Bachelor of Engineering (Honours) in Civil Engineering

Professor AU Tat Kwong Francis
Professor and Head
Department of Civil Engineering
The University of Hong Kong
HONG KONG

Mr CHAN Ka Kin Ken
Associate Director
Ove Arup & Partners
HONG KONG

Professor Mahroo EFTEKHARI
Professor of Building Services Engineering
School of Architecture, Building and Civil Engineering
Loughborough University
THE UNITED KINGDOM

Professional Diploma in Building Information Modelling

Mr CHAN Ka Kin Ken
Associate Director
Ove Arup & Partners
HONG KONG

Professor Mahroo EFTEKHARI
Professor of Building Services Engineering
School of Architecture, Building and Civil Engineering
Loughborough University
THE UNITED KINGDOM

Dr KEUNG Chung Wai
Instructor
Department of Architecture and Civil Engineering
City University of Hong Kong
HONG KONG

Professional Diploma in Building Services Engineering

Professor Mahroo EFTEKHARI
Professor of Building Services Engineering
School of Architecture, Building and Civil Engineering
Loughborough University
THE UNITED KINGDOM

Professor LAI Chi Keung
Associate Head and Professor
Department of Architecture and Civil Engineering
City University of Hong Kong
HONG KONG

Mr MAK Chak Kwong
Senior Cluster Manager
Facility Management, Kowloon East Cluster
Hospital Authority
HONG KONG

** The Panel Secretary is also a member of the Accreditation Panel.

HKCAAVQ Report No.: 22/59