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

ACCREDITATION REPORT

TUNG WAH COLLEGE

LEARNING PROGRAMME ACCREDITATION

BACHELOR OF SCIENCE (HONOURS) IN MEDICAL IMAGING

JUNE 2023

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1. TERMS OF REFERENCE

1.1 Based on the Service Agreement (No.: AA868), 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 (Cap. 592) (AAVQO), was commissioned by Tung Wah College (the Operator) to conduct a learning programme accreditation exercise with the following Terms of Reference:

(a) To conduct an accreditation test as provided for in the AAVQO to determine whether the programme of the Operator (with specifications listed below) meets the stated objectives and QF standards and can be offered as an accredited programme; and

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

Specifications of the programme 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	Claimed QF level
Bachelor of Science (Honours) in Medical Imaging 醫療影像學(榮譽)理學士	Bachelor of Science (Honours) in Medical Imaging 醫療影像學(榮譽)理學士	Full-time	4 years	N/A	5

2. HKCAAVQ'S DETERMINATION

2.1 HKCAAVQ has determined that the Bachelor of Science (Honours) in Medical Imaging programme meets the stated objectives and QF standard at Level 5 and can be offered as an accredited programme with a validity period of five years.

2.2 **Validity Period**

2.2.1 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.

2.3 The determinations on the Programme are specified as follows:

Name of Operator	Tung Wah College 東華學院
Name of Award Granting Body	Tung Wah College 東華學院
Title of Learning Programme	Bachelor of Science (Honours) in Medical Imaging 醫療影像學(榮譽)理學士
Title of Qualification [Exit Award]	Bachelor of Science (Honours) in Medical Imaging 醫療影像學(榮譽)理學士
Primary Area of Study and Training	Medicine, Dentistry and Health Sciences
Sub-area (Primary Area of Study and Training)	Medicine
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable
Industry	Not applicable
Branch	Not applicable
QF Level	Level 5
QF Credits	711
Mode of Delivery and Programme Length	Full-time, 4 years
Intermediate Exit Award	Not applicable
Start Date of Validity Period	1 September 2024
End Date of Validity Period	31 August 2029
Number of Enrolment	One enrolment per year

Maximum Number of New Students	<u>For AY2024/25 and AY2025/26</u> Year 1 Entry: 30 <u>From AY2026/27 onwards</u> Year 1 Entry: 30 Senior Year Entry: 5
Specification of Competency Standards-based Programme	☐ Yes ☑ No
Address of Teaching Venue	1) King's Park Campus (KPC) Ma Kam Chan Memorial Building, 31 Wylie Road, Homantin, Hong Kong 2) Mongkok Campus (MKC) Cheung Kung Hai Memorial Building (MKA), 90A, and Cheung Chin Lan Hong Building (MKB), 98, Shantung Street, Mongkok, Hong Kong 3) Kwai Hing Campus (KHC) 16/F, Tower 2, Kowloon Commerce Centre, 51 Kwai Cheong Road, Kwai Chung, Hong Kong

2.4 **Restriction**

2.4.1 The Programme is required to obtain professional recognition from the Radiographers Board before graduation of the first cohort of students and ensure the maintenance of the professional recognition thereafter throughout the rest of the validity period as approved by HKCAAVQ.

For the fulfilment of the restriction, the College is to provide evidence of professional recognition obtained from the Radiographers Board by 31 August 2028. (Para. 4.1.5)

2.5 **Advice**

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

2.5.1 The College is advised to monitor students' performance throughout the Programme and adapt entry requirements as appropriate. (Para. 4.2.4)

2.5.2 The College is advised to closely monitor and review if students develop a sense of professional identity starting from their Year 1 study; and, if an appropriate balance between diagnostic radiography and radiotherapy is maintained. (Para. 4.3.3)

2.5.3 The College is advised to conduct timely reviews to evaluate if best professional practices and equal learning outcomes for all students in the Programme and in particular in MED4022 Breast Imaging and Medical Image Analysis are applied and ensured. (Para. 4.4.3)

2.5.4 The College is advised that the Objective Structured Clinical Examination (OSCE) could be utilised as a further assessment tool to assure Programme Intended Learning Outcomes (PILOs). (Para. 4.4.4)

2.5.5 The College is advised to be proactive and strategic in ensuring that with the support from the Hospital Authority (HA) and private hospitals, the clinical practicum made available for the students is of high quality. (Para. 4.4.5)

2.5.6 The College is advised to keep under review the programme staffing to ensure the maintenance of appropriate levels of staffing and its alignment with the disciplinary requirements. (Para. 4.5.6)

2.5.7 The College is advised to establish a mechanism to closely monitor the implementation and maintenance of programme resources, including but not limited to equipment, software, library resources, and laboratories, with corresponding regulatory approvals and licenses. (Para. 4.6.2)

2.6 HKCAAVQ will subsequently satisfy itself whether the Operator remains competent to achieve the relevant objectives and the Programme continues 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. 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 Tung Wah College (TWC), established by the Tung Wah Group of Hospitals (TWGHs), went through the Institutional Review (IR) by HKCAAVQ in 2010 and has been registered under the Post-Secondary Colleges Ordinance (Cap. 320) as an approved self-financing degree granting institution since 2011.

3.2 TWC commissioned HKCAAVQ to conduct a Learning Programme Accreditation for the Bachelor of Science (Honours) in Medical Imaging programme. HKCAAVQ formed an expert Panel for this exercise (Panel Membership in Appendix 1). The site visit was conducted via video conference from 20 to 21 April 2023. HKCAAVQ's Manual for the Four-stage Quality Assurance Process under the Hong Kong Qualifications Framework was the guiding document for the Operator and the Panel in conducting this exercise.

3.3 In consideration of the Operator's track record established from previous accreditation exercises, information on the following aspects of the Programme was not required in accordance with HKCAAVQ's Differentiation Approach:

Accreditation Standard	Information Not Required
LPA-5 Programme Leadership and Staffing	Information on institution-wide staff development policy.
LPA-6 Learning, Teaching and Enabling Resources/Services	Information on institution-wide student support services and institution-wide financial resources.

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 Programme has the following Programme Objectives (POs):

PO1 To provide students with knowledge, technology and skills in the professional and quality practice of medical imaging and radiation science.

PO2 To prepare students to accept the responsibility of effective and compassionate patient care by developing psychosocial understanding, communication abilities and evidence-based clinical practice.

PO3 To develop students' understanding and appreciation of the contributions of different disciplines to health and illness management.

PO4 To develop students' critical, creative thinking and life-long learning as well as analytical and problem-solving skills.

PO5 To enhance students' interpersonal skills, including teamwork and communication skills in the healthcare setting.

PO6 To extend students' understanding and appreciation of other cultures and environments.

4.1.2 The Programme has the following Programme Intended Learning Outcomes (PILOs):

PILO1 Demonstrate possession of a sound knowledge base for the practice of medical imaging.

PILO2 Acquire professional competencies in the provision of quality medical imaging services to patients.

PILO3 Demonstrate readiness to accept new challenges and willingness to critically examine new technique and technology in medical imaging related professional practice.

PILO4 Apply ethical, legal and professional standards in clinical practice of medical imaging.

PILO5 Apply the fundamental tenets of medical science, including but not limited to human anatomy and physiology, microbiology, medical physics, and pathology, considering the relationship between medicine, individual and society.

PILO6 Apply critical, creative thinking, evidence-based approach and analytical skills in problem-solving and decision making and acquire knowledge and skills to be able to integrate research studies, evaluate and utilize research findings in healthcare practice.

PILO7 Demonstrate acquisition of generic attributes as required for life-long learning and effective social and interpersonal skills, as well as proficiency in both Chinese and English languages for communicating with others professionally in the social and healthcare settings.

PILO8 Demonstrate social awareness and understanding of the community value of non-profit organizations in terms of their missions, culture and overall impact and significance in Hong Kong.

4.1.3 The Panel reviewed the following information regarding the POs and the PILOs:

(a) Mappings of the PILOs to the POs;

(b) Mappings of the courses of the Programme to the PILOs;

(c) Mappings of the courses of the Programme to the Generic Level Descriptors (GLDs) of the QF at Levels 4 and 5;

(d) Samples of teaching and learning materials, assessment tasks (including formative and summative assessments) and associated assessment criteria / rubrics of ten selected courses across Year 1, Year 2, Year 3 and Year 4 of the Programme.

4.1.4 Having reviewed the above information and discussed with representatives of the Operator, the Panel had the following observations and comments:

(i) The POs are in line with the needs of the diagnostic radiography industry in Hong Kong, and the PILOs are aligned with the POs and meet the standards at the stated QF Level.

(ii) The Panel commented the distinctive programme curriculum, which includes mammography element, as well as, artificial intelligence and big data in the field of medical imaging, and considered that high employability of the graduates could be enabled.

(iii) The Panel considered that the samples of teaching and learning materials, assessment tasks (including formative and summative assessments) and associated assessment criteria / rubrics were in line with the intended learning outcomes at QF Level 5.

(iv) The Panel met with the representative of potential employers, who shared their expectations and supplemented that there is a shortage of around 400 radiographers in Hong Kong, and considered that the POs addressed the market needs.

4.1.5 The Panel was informed that the Programme will seek professional recognition from the Radiographers Board (RB) of the Supplementary Medical Professions Council (SMPC). Upon successful recognition, graduates of the Programme are eligible to apply for Diagnostic Radiographer (Part II) registration after fulfilling relevant requirements. The College is required to comply with the restriction below, and report to HKCAAVQ when there are any changes of the recognition status by the RB.

Restriction

The Programme is required to obtain professional recognition from the Radiographers Board before graduation of the first cohort of students and ensure the maintenance of the professional recognition thereafter throughout the rest of the validity period as approved by HKCAAVQ.

For the fulfilment of the restriction, the College is to provide evidence of professional recognition obtained from the RB by 31 August 2028.

4.1.6 In consideration of the above information and the discussion with various stakeholders of the Programme, the Panel formed the view that the Programme can be considered as meeting the QF standard at Level 5 and the community need.

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 minimum admission requirements of the Programme are outlined below.

Year 1 entry [Note (i)]

(a) HKDSE candidates from 2024/25 onwards, have obtained Level 3 for Chinese Language and English Language and Level 2 for Mathematics and have "Attained (A)" for Citizenship and Social Development plus Physics or Chemistry or Biology at Level 2 ("332A+2") in HKDSE [Note (ii)]; or

(b) HKDSE candidates before 2024/25, have obtained Level 3 for Chinese Language and English Language and Level 2 for Mathematics and Liberal Studies plus one combined science subject or Physics or Chemistry or Biology at Level 2 ("3322+2") in HKDSE [Note (ii)]; or

(c) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/ two AS subjects including Physics, Chemistry and Biology in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or

(d) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 points, including two IB (High Level) science subjects at level 4, and fulfilled the English language requirements:

(i) Grade 4 or better in the Higher Level English Language (B Syllabus); or

(ii) Grade 5 or better in the Standard Level English Language (B Syllabus); or

(iii) Grade 4 or better in the Higher or Standard Level English Language (A1 or A2 Syllabus); or

(iv) Grade 4 or better in the Standard Level English – Text and Performance; or

(v) Grade 4 or better in the Standard Level English – Literature and Performance (A1 syllabus); or

(e) Have met the 2nd cut-off line* of the respective province for admission to Mainland key universities in the National Joint College Entrance Examination (JEE) with science-related subjects or stream requirements and the scores of English Language is over 100 (*or the "cut-off line for undergraduate studies", for provinces and cities where the 1st and 2nd cut-off lines are combined) [普通高等學校聯合招生考試(JEE, PRC) 達到所屬省市報讀第二批重點高校分數線（理科）* 以上及英語科達 100 分或以上（*或「本科批次」分數線適用於「本科一批」及「本科二批」合拼為 「本科批次」的省市）]; or

(f) Have obtained equivalent qualifications (such as meeting the admission requirements of a degree programme offered outside Hong Kong).

Senior Year Entry Note (i)

(a) Have completed BSc in Radiography or relevant qualification; or

(b) Have obtained equivalent qualifications.

Notes:

(i) Interviews and aptitude tests are arranged for admission purposes.

(ii) Preference will be given to applicants who have obtained Level 3 or above in Combined Science or Physics or Chemistry or Biology in HKDSE.

4.2.2 In line with HKCAAVQ's policy on the yearly quota of non-standard admission for its accredited programmes, the maximum number of non-standard admission (including mature-aged students) for degree programmes should be capped, on a programme basis, at a maximum of 5% of the actual number of new students of the year. The cap is applied in line with the general expectation of self-financed degree-awarding institutions in safeguarding teaching and learning quality and thereby upholding the credibility and recognition

of the qualifications. The College confirmed that it would adhere to this policy.

4.2.3 The College provided to the Panel the projected yearly student intake from AY2024/25 to AY2028/29 in a progressive increase approach. The Panel considered the proposed maximum number of new students per year below appropriate.

For AY2024/25 and AY2025/26
Year 1 Entry: 30

From AY2026/27 onwards
Year 1 Entry: 30
Senior Year Entry: 5

4.2.4 The Panel discussed with the College the minimum entry requirements in connection with the preference to be given to applicants who have obtained Level 3 or above in Combined Science or Physics or Chemistry or Biology in HKDSE; and the language proficiency. The College is **advised** to monitor students' performance throughout the Programme and adapt entry requirements as appropriate.

4.2.5 In consideration of the above information, the Panel formed the view that the minimum admission requirements would in general be effective for recruiting students with the necessary skills and knowledge to undertake the 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.

4.3.1 The Programme is offered under the School of Medical and Health Sciences in a full-time mode as a four-year programme. In Year 1 and Year 4, an academic year of the Programme consists of two semesters with 14 weeks each. In Year 2 and Year 3, the academic year consists of three semesters, two regular semesters of 14 weeks each and a summer semester of seven weeks. The College provided the Panel with the following information:

(a) The offering sequence of courses each year, and

(b) Course Description Forms, which are spelt out:

(i) Course Objectives;
(ii) Course Intended Learning Outcomes (CILOs);
(iii) Course Indicative Syllabus;
(iv) Learning and teaching methodology;
(v) Assessment methods in alignment with CILOs;
(vi) Student study effort required;
(vii) Reading list and references.

4.3.2 The Programme comprises courses in three categories: Discipline, Language and General Education courses. It has a total of 138 TWC credits with 80% discipline content and 20% generic content. The structure of the Programme is summarised below:

Courses by Category

Category	No. of Courses (%)	No. of TWC Credits (%)
Discipline	35 (80%)	111 (80%)
Language	5 (11%)	15 (11%)
General Education (GE)	4 (9%)	12 (9%)
Total	44 (100%)	138 (100%)

Courses by Year

	No. of Discipline Courses	No. of Language Courses	No. of GE Courses	Total
Year 1	7	3	2	12
Year 2	10	2	1	13
Year 3	12	-	1	13
Year 4	6	-	-	6
Total	35	5	4	44

4.3.3 The Panel discussed the student progression through the Programme and observed from the accreditation documents and the Response to Initial Comments that topics of both diagnostic radiography and radiotherapy are included. The College considered developing students' interest in the medical imaging discipline right from the first year of study by introducing some discipline-specific

knowledge, employability skills and training is essential. Not only through courses which build students' industry awareness, employability skills and job-readiness, the College mentioned that students will be introduced to more imaging modalities in the form of visit(s) to clinical facilities. For continuous improvement of the Programme, the College is **advised** to closely monitor and review if students develop a sense of professional identity starting from their Year 1 study; and, if an appropriate balance between diagnostic radiography and radiotherapy is maintained.

4.3.4 The College provided the Panel with the Honours Year Project Handbook which includes information on, among others, course intended learning outcomes, project supervision and progress monitoring, and assessment components. Students will work in groups of 5-6 on a research topic under the guidance of academic staff members. Students are required to identify a research topic, develop research protocol and methods, collect data and present the results. The project demands extensive reading, data collection, research work, etc. which integrates various subject knowledge and skills to accomplish the task. As a result, students can contribute to the research that provides a basis for their prospective evidence-based professional practice.

4.3.5 The Panel was informed that clinical practicum is an essential component of the Programme and accounts for 18 credits out of total 138 TWC credits. The structure is as follows:

Course	Year and Semester	Duration
MED2029 Clinical Studies I (Medical Imaging) 4 credits	Year 2 Semester 3	8 weeks
MED3102 Clinical Studies II (Medical Imaging) 2 credits	Year 3 Semester 2	4 weeks
MED3103 Clinical Studies III (Medical Imaging) 6 credits	Year 3 Semester 3	12 weeks
MED4020 Clinical Studies IV (Medical Imaging) 6 credits	Year 4 Semester 2	12 weeks

Remark: Clinical Studies (1 credit = 2-week clinical placement)

The College provided the Panel with the Clinical Education Handbook which includes information on, among others, practice expectations for the graduate, clinical coordinator's role, clinical educator's role, students' role, assessment criteria and

guidance/examples on professional behaviours. In 36 weeks, students have to participate in practicum for 1,440 clinical hours before graduation. The College considered that, after the clinical practicum, students will be geared with sufficient exposure and practice opportunities in divergent clinical settings and allow students to apply knowledge and skills in real clinical situations.

4.3.6 Having reviewed the above information and discussed with representatives of the Operator, the Panel considered that the Programme has an appropriate structure with relevant content enabling students to achieve the stated PILOs and meet the POs.

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 The Programme employs a wide spectrum of teaching, learning and assessment activities, including lectures, tutorials, seminars, laboratory sessions, case studies, problem-based activities, group projects, presentations, clinical practicum and examinations. The medium of instruction of the Programme is English except for the Chinese language course(s). The Course Description Forms provide summary information of each course such as course objectives, course intended learning outcomes, course indicative syllabus, teaching and learning methods, contact and non-contact hours, assessment methods and references.

4.4.2 The Panel reviewed the following in relation to teaching, learning and assessment:

(a) Internal Validation Report and Responses to comments from members of Programme Advisory Committee (PROAC) and Programme Planning Committee (PPC) on the Programme;

(b) Course Description Form of all courses;

(c) Honours Year Project Handbook and Clinical Education Handbook;

(d) Samples of teaching and learning materials, formative and summative assessment tasks, and associated assessment criteria/rubrics of the following courses:

- Computed Tomography for Imaging Practice
- Clinical Studies
- Ethical and Legal Aspects in Health Care
- Honours Year Project
- Medical Imaging Studies I
- Medical Imaging Studies II
- Patient Care in Imaging Practice
- Radiographic Imaging Practice
- Radiographic Imaging Science
- Radiation Protection and Safe Practice

4.4.3 In meetings with teaching staff, the Panel discussed the sensitivity of the learning and teaching regarding the disciplinary courses of the Programme and the observed professional practices in the industry. The College is **advised** to conduct timely reviews to evaluate if best professional practices and equal learning outcomes for all students in the Programme and in particular in MED4022 Breast Imaging and Medical Image Analysis are applied and ensured.

4.4.4 Through communications with the stakeholders, the Panel noted their comments as listed below:

(i) Potential employers of graduates opined that an additional performance-based testing widely used in health professions education shall be developed for the Programme in measuring the clinical competence of the students. The College is **advised** that the Objective Structured Clinical Examination (OSCE) could be utilised as a further assessment tool to assure PILOs.

(ii) A member of the Internal Validation Panel (IVP) of the College mentioned that they were consulted on various issues, including designs of programme curriculum and arrangements of clinical practicum; and commended the effectiveness of the College's effort and capacity in delivering the Programme.

(iii) Practicum place providers said that complications may arise in accommodating clinical training of all students from various programmes and numerous offering institutions simultaneously.

4.4.5 In connection with the complications raised by practicum place providers, the Panel explored further the proposed arrangement of clinical practicum and the places available for the Programme with the College and the stakeholders. The College assured that sufficient clinical practicum places could be secured and shared with the Panel the proposed arrangement and ongoing communications with practicum place providers. The external stakeholders also supported that the College could strategically arrange the clinical practicum by taking the current timeline of other institutions into consideration in advance. Based on the above information and noted that the clinical practicum is three years away, the Panel considered that there is ample time and the College could ensure students' exposure and practice opportunities in divergent clinical settings. For continuous improvement of the practicum arrangements, the College is **advised** to be proactive and strategic in ensuring that with the support from the Hospital Authority (HA) and private hospitals, the clinical practicum made available for the students is of high quality.

4.4.6 In consideration of the above, the Panel considered that the learning, teaching and assessment activities of the Programme will be in general effective in delivering the programme content and 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 are kept updated for the quality delivery of the programme.

4.5.1 The Operator was not required to provide information on institution-wide staff development policy when it submitted the accreditation document (Para. 3.3), and subsequently, the Panel has not raised any related questions. The requirements on this aspect are considered to have been met.

4.5.2 In terms of programme-specific staff development, the College provided the Panel with a list of collaborative research, consultancy work and community services that current teaching staff are currently engaged. The College also shared during the site visit that teaching

staff are entitled to apply for financial subsidies, study leaves, and time off for professional examinations or attending conferences.

4.5.3 The College provided the Panel with information on the proposed full-time and part-time academic staff of the Programme together with the staffing projection below:

Academic Year	**2024/25**	**2025/26**	**2026/27**	**2027/28**	**2028/29**
Staff Rank	**Projected Number of Academic Staff (FTE)**				
Professor	0	0	1	1	1
Associate Professor	1	1	1	1	1
Assistant Professor	0	0	0	1	2
Senior Lecturer	0	0	1	1	1
Lecturer	0	0	0	0	0
Senior Clinical Associate	0.5	1	1	2	2
Clinical Associate	0	0	0	0	0
Assistant Lecturer	0	0	0	0	0
Sub-total Number of Academic Staff for Discipline Courses	1.5	2	4	6	7
Additional Number of General Education and Language Staff for the Programme	0.5	1	1	1	1
Total Number of Academic Staff (FTE) for the Programme	**2**	**3**	**5**	**7**	**8**
	Projected Number of Support Staff (FTE)				
Executive Officer	0.2	0.5	0.5	0.5	0.5
Executive Assistant	0	0	0	0	0
Laboratory Technical Officer	1	1	1	1	1
Total Number of Support Staff (FTE) for the Programme	**1.2**	**1.5**	**1.5**	**1.5**	**1.5**

4.5.4 The Panel reviewed the profiles of the existing and proposed management staff and teaching staff of the Programme and considered that they have relevant qualifications and experience to manage and teach across various imaging modalities.

4.5.5 With an estimated progressive increase in new students admitted to the Programme and the annual attrition rate assumed at 5%, the College provided the overall projected staff-to-student ratio below:

Academic Year	**2024/25**	**2025/26**	**2026/27**	**2027/28**	**2028/29**
Year of Study	**Projected Number of Students**				
Year 1	20	25	30	30	30
Year 2	0	19	24	29	29
Year 3	0	0	23	28	33
Year 4	0	0	0	22	27
Sub-total	**20**	**44**	**77**	**109**	**119**
Total Number of Academic Staff (FTE) for the Programme	**2**	**3**	**5**	**7**	**8**
Overall Projected Staff-to-Student Ratio	**1:10**	**1:15**	**1:15**	**1:16**	**1:15**

4.5.6 In reviewing the accreditation documents, Response to Initial Comments and discussions with stakeholders of the College during the site visit, despite the possible challenges the College may face in their recruitment of various levels of teaching and technical staff for the Programme and the proposed current teaching and support staff are shared among various programmes of the College, the Panel considered the College has ample resources and time to secure optimal expertise to ensure the teaching quality and technical support of the Programme. The College is **advised** to keep under review the programme staffing to ensure the maintenance of appropriate levels of staffing and its alignment with the disciplinary requirements.

4.5.7 Notwithstanding the advice above, the Panel formed the view that the programme leadership and staffing are in general appropriate and the staff have the appropriate qualifications and experience necessary for effective management and delivery of the Programme.

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.

4.6.1 The Operator was not required to provide information on institution-wide student support services and institution-wide financial resources when it submitted the accreditation document (Para. 3.3), and subsequently, the Panel has not raised any related questions. The requirements on this aspect are considered to have been met.

4.6.2 The College provided the Panel with information on its learning, teaching and enabling resources relevant to the delivery of the Programme. Four new teaching laboratories equipped with medical imaging standard facilities and equipment, including Radiation Dosimetry, Digital Radiography, Ultrasound Imaging and Intelligent Medical Imaging, are planned to be established following a concrete timeline. The College also provided the list of proposed specialised software and equipment, summary information of library holdings, e-databases, e-journals, and other e-resources relevant to the Programme, together with the relevant quantities, utilisation rates and capacities. In light of the complexity and scale of the implementation plan, the College is **advised** to establish a mechanism to closely monitor the implementation and maintenance of programme resources, including but not limited to equipment, software, library resources, and laboratories, with corresponding regulatory approvals and licenses.

4.6.3 The Panel noted from the accreditation documents and discussion with relevant stakeholders of the Programme that some laboratories and programme-specific facilities and equipment will be shared with other programmes of the College. The College confirmed that the capacity and utilisation of the programme-specific physical resources and space will be continuously monitored and regular review of the need to increase the physical resources and space will be conducted.

4.6.4 In consideration of the above observation, the information in the Response to Initial Comments and discussions during the site visit, the Panel considered that the College will provide in general appropriate and sufficient learning, teaching and enabling resources for the delivery of the Programme.

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 Regarding quality assurance (QA) in the development of the Programme, the Panel noted that proper QA procedures had been gone through, including obtaining comments from external stakeholders through PROAC, PPC and IVP, responding to their comments, and scrutinising the report of IVP by the School Board, the Quality Assurance Committee, and the Academic Board.

4.7.2 During the site visit meetings with the external stakeholders of the Programme, the Panel learnt about their engagement and dedication to the Programme through their respective roles, such as members of PROAC, industry advisors, and members of IVP.

4.7.3 The College provided the Panel with the following information about the Programme to demonstrate that the Programme will be monitored and reviewed on an on-going basis:

(a) Committee Structure and Terms of Reference of Board and Committees;

(b) Sample Course and Teaching Evaluation (CTE) questionnaire;

(c) Quality Assurance Manual.

4.7.4 During the site visit, the College confirmed that the promotional materials will be ensured to be explicit in informing any potential applicants and any potential employers that the Programme as it currently stands is not accredited by RB while professional recognition will be sought.

4.7.5 The Panel noted from the Response to Initial Comments that, following the College's current policy, an Associate Professor in Medical Imaging from an oversea institution will be invited to serve as the External Examiner of the Programme. The Panel also observed from the accreditation documents that the appointment criteria of External Examiners for all Bachelor Programmes are proposed to be changed from "at least at the rank of Associate Professor or equivalent" to "at least at the rank of Assistant Professor

or equivalent". The College confirmed that prior approval from HKCAAVQ will be obtained via submission of an application for substantial change. While the Programme is to follow the approved institution-wide policy, the Panel recognised that the College will ensure the appointed External Examiner(s) of the Programme possess appropriate overall coverage of experiences and knowledge.

4.7.6 In light of the above, the Panel formed the view that the College has an effective quality assurance system in place for monitoring and reviewing the development and performance of the Programme on an on-going basis.

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 https://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.

Appendix 1

Tung Wah College

Learning Programme Accreditation for
Bachelor of Science (Honours) in Medical Imaging

20-21 April 2023

Panel Membership

Panel Chair

Professor Philip Marcus BODMAN
Emeritus Professor
Faculty of Business, Economics and Law
The University of Queensland
AUSTRALIA

*** Panel Secretary**

Ms Psyche LIU
Registrar
Academic Accreditation and Assessment
Hong Kong Council for Accreditation of Academic and Vocational Qualifications
HONG KONG

Panel Members

Professor Andrew Keith DAVEY
Director International (Health)
Griffith Health Group
Griffith University
AUSTRALIA

Ms Cynthia YIM
Radiographer I
Gleneagles Hospital
HONG KONG

Dr Lynette TEO
Assistant Professor
National University of Singapore
SINGAPORE

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

Appendix 2

Graduate Profile of Bachelor of Science (Honours) in Medical Imaging

Qualification Title	Bachelor of Science (Honours) in Medical Imaging 醫療影像學(榮譽)理學士
Qualification Type	Bachelor's Degree
QF Level	Level 5
Primary Area of Study and Training	Medicine, Dentistry and Health Sciences
Sub-area (Primary Area of Study and Training)	Medicine
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable
Programme Objectives	The objectives of the Programme are: 1. To provide students with knowledge, technology and skills in the professional and quality practice of medical imaging and radiation science. 2. To prepare students to accept the responsibility of effective and compassionate patient care by developing psychosocial understanding, communication abilities and evidence-based clinical practice. 3. To develop students' understanding and appreciation of the contributions of different disciplines to health and illness management. 4. To develop students' critical, creative thinking and life-long learning as well as analytical and problem-solving skills. 5. To enhance students' interpersonal skills, including teamwork and communication skills in the healthcare setting. 6. To extend students' understanding and appreciation of other cultures and environments.
Programme Intended Learning Outcomes	Upon completion of the Programme, students will be able to:

	1. Demonstrate possession of a sound knowledge base for the practice of medical imaging. 2. Acquire professional competencies in the provision of quality medical imaging services to patients. 3. Demonstrate readiness to accept new challenges and willingness to critically examine new technique and technology in medical imaging related professional practice. 4. Apply ethical, legal and professional standards in clinical practice of medical imaging. 5. Apply the fundamental tenets of medical science, including but not limited to human anatomy and physiology, microbiology, medical physics, and pathology, considering the relationship between medicine, individual and society. 6. Apply critical, creative thinking, evidence-based approach and analytical skills in problem-solving and decision making and acquire knowledge and skills to be able to integrate research studies, evaluate and utilize research findings in healthcare practice. 7. Demonstrate acquisition of generic attributes as required for life-long learning and effective social and interpersonal skills, as well as proficiency in both Chinese and English languages for communicating with others professionally in the social and healthcare settings. 8. Demonstrate social awareness and understanding of the community value of non-profit organizations in terms of their missions, culture and overall impact and significance in Hong Kong.
Education Pathways	Graduates of the Programme will be eligible for admission to a post-graduate programme in Medical Imaging and Radiation Science or related discipline, such as • Master of Science in Medical Imaging and Radiation Science, Master of Science in Health Informatics and Master of Science in Medical Physics of the Hong Kong Polytechnic University • Master of Health Services Management of the Chinese University of Hong Kong • Certificate/Diploma in Vascular and Interventional Radiology of the Chinese University of Hong Kong

	• Master of Medical Sciences of the University of Hong Kong • Master of Public Health of the University of Hong Kong • MPhil/PhD, local universities Besides, graduates can also further their studies at overseas universities, such as • Master of Medical Imaging Science of the University of Sydney • Master of Medical Physics of the University of Surrey • MPhil/PhD, universities overseas
Employment Pathways	Graduates of the Programme are expected to be qualified to apply for registration as Registered Radiographers (Diagnostic) (Part II) with the Radiographers Board, the Supplementary Medical Professions Council of Hong Kong. This statutory registration is a prerequisite for employment in public and private radiological or medical imaging practice in Hong Kong.
Minimum Admission Requirements	Year 1 entry Note (i) (a) HKDSE candidates from 2024/25 onwards, have obtained Level 3 for Chinese Language and English Language and Level 2 for Mathematics and have "Attained (A)" for Citizenship and Social Development plus Physics or Chemistry or Biology at Level 2 ("332A+2") in HKDSE Note (ii); or (b) HKDSE candidates before 2024/2025, have obtained Level 3 for Chinese Language and English Language and Level 2 for Mathematics and Liberal Studies plus one combined science subject or Physics or Chemistry or Biology at Level 2 ("3322+2") in HKDSE Note (ii); or (c) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/ two AS subjects including Physics, Chemistry and Biology in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or (d) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 points, including two IB (High Level) science subjects at level 4, and fulfilled the English language requirements:

	(i) Grade 4 or better in the Higher Level English Language (B Syllabus); or (ii) Grade 5 or better in the Standard Level English Language (B Syllabus); or (iii) Grade 4 or better in the Higher or Standard Level English Language (A1 or A2 Syllabus); or (iv) Grade 4 or better in the Standard Level English – Text and Performance; or (v) Grade 4 or better in the Standard Level English – Literature and Performance (A1 syllabus); or (e) Have met the 2nd cut-off line* of the respective province for admission to Mainland key universities in the National Joint College Entrance Examination (JEE) with science-related subjects or stream requirements and the scores of English Language is over 100 (*or the "cut-off line for undergraduate studies", for provinces and cities where the 1st and 2nd cut-off lines are combined) [普通高等學校聯合招生考試(JEE, PRC) 達到所屬省市報讀第二批重點高校分數線（理科）* 以上及英語科達 100 分或以上（*或「本科批次」分數線適用於「本科一批」及「本科二批」合拼為 「本科批次」的省市）]; or (f) Have obtained equivalent qualifications (such as meeting the admission requirements of a degree programme offered outside Hong Kong). <u>Senior Year Entry</u> Note (i) (a) Have completed BSc in Radiography or relevant qualification; or (b) Have obtained equivalent qualifications. Notes: (i) Interviews and aptitude tests are arranged for admission purposes. (ii) Preference will be given to applicants who have obtained Level 3 or above in Combined Science or Physics or Chemistry or Biology in HKDSE.
Operator	Tung Wah College 東華學院

HKCAAVQ Report No.: 23/82