



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 BIOMEDICAL SCIENCE**

AND

LEARNING PROGRAMME RE-ACCREDITATION

**BACHELOR OF MEDICAL SCIENCE (HONOURS)
(TO BE RETITLED AS BACHELOR OF SCIENCE
(HONOURS) IN FORENSIC BIOMEDICAL SCIENCE)**

**BACHELOR OF SCIENCE (HONOURS)
IN MEDICAL LABORATORY SCIENCE**

AUGUST 2022

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1. TERMS OF REFERENCE

1.1 Based on the Service Agreement (No.: AA798), 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), was commissioned by Tung Wah College (the Operator) to conduct a learning programme accreditation and re-accreditation exercise with the following Terms of Reference:

- (a) To conduct an accreditation test as provided for in the AAVQO to determine whether
 - (i) the Bachelor of Science (Honours) in Biomedical Science of the Operator meets the stated objectives and QF standards and can be offered as an accredited programme;
 - (ii) the Bachelor of Medical Science (Honours) and Bachelor of Science (Honours) in Medical Laboratory Science of the Operator meet the stated objectives and QF standards and can continue to be offered as accredited programmes; and
- (b) To issue to the Operator an accreditation report setting out the results of the determination in relation to (a) by HKCAAVQ.

2. HKCAAVQ'S DETERMINATION

2.1 HKCAAVQ has determined that the Bachelor of Science (Honours) in Biomedical Science (BSc(BMSc)) 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 from 1 September 2023.

2.2 HKCAAVQ has determined that the Bachelor of Medical Science (Honours) (BMSc) 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 from 1 September 2022, and that, subject to the compliance with the restriction set out below, the Bachelor of Science (Honours) in Medical Laboratory Science (BSc(MLSc)) 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 from 1 September 2022.

2.3 Validity Period

2.3.1 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.

2.4 The determinations on the BSc(BMSc), BMSc and BSc(MLSc) Programmes 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 Biomedical Science 生物醫學（榮譽）理學士	<u>For AY2022/23</u> Bachelor of Medical Science (Honours) 醫療科學（榮譽）學士 <u>Retitled from AY2023/24</u> Bachelor of Science (Honours) in Forensic Biomedical Science 法證生物醫學（榮譽）理學士	Bachelor of Science (Honours) in Medical Laboratory Science 醫療化驗科學（榮譽）理學士
Title of Qualification [Exit Award]	Bachelor of Science (Honours) in Biomedical Science 生物醫學（榮譽）理學士	<u>For AY2022/23</u> Bachelor of Medical Science (Honours) 醫療科學（榮譽）學士	Bachelor of Science (Honours) in Medical Laboratory Science 醫療化驗科學（榮譽）理學士

		Retitled from <u>AY2023/24</u> Bachelor of Science (Honours) in Forensic Biomedical Science 法證生物醫學 (榮譽)理學士	
Primary Area of Study and Training	Sciences	Sciences	Medicine, Dentistry and Health Sciences
Sub-area (Primary Area of Study and Training)	Life Sciences	Life Sciences	Medicine
Other Area of Study and Training	Not applicable	Not applicable	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable	Not applicable	Not applicable
QF Level	Level 5		
QF Credits	571	For AY2022/23 571 for Basic Medical Sciences Major 575 for Forensic Science Major <u>From AY2023/24 onwards</u> 575	842
Mode of Delivery and Programme Length	Full-time, 4 Years		
Intermediate Exit Award	Not applicable		
Start Date of Validity Period	1 September 2023	1 September 2022	1 September 2022

End Date of Validity Period	31 August 2028	31 August 2027	31 August 2027
Number of Enrolment	One enrolment per year		
Maximum Number of New Students	Year-1 Entry 20 per year Year-3 Entry 15 per year	<u>For AY2022/23</u> Year-1 Entry 50 per year Year-3 Entry 25 per year <u>From AY2023/24 onwards</u> Year-1 Entry 20 per year Year-3 Entry 15 per year	Year-1 Entry 45 per year
Specification of Competency Standards-based Programme	☐ Yes ☒ No		
Specification of Generic (Foundation) Competencies-based Programme	☐ Yes ☒ No		
Address of Teaching Venue	(1) King's Park Campus 31 Wylie Road, Homantin, Kowloon (2) Mongkok Campus 90A & 98, Shantung Street, Mongkok, Kowloon (3) Kwai Hing Campus 16/F, Tower B, Kowloon Commerce Centre, Kwai Hing, Kowloon		

2.5 Restriction

- 2.5.1 The College is to ensure that the Bachelor of Science (Honours) in Medical Laboratory Science programme maintains its professional recognition by the Medical Laboratory Technologists Board throughout the validity period as approved by HKCAAVQ. (Para. 4.1.11)

2.6 Recommendations

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

All Programmes

- 2.6.1 The College should consider further developing students' interest in the discipline right from the first year of study by introducing more discipline-specific knowledge, employability skills and training, for example, through a course which builds students' industry awareness, employability skills and job-readiness which can be built on throughout the curriculum, to enhance students' interest in the discipline and independent learning in tertiary education and to relieve the attrition rate and number of academic probation. (Paras. 4.3.3 and 4.3.8)
- 2.6.2 The College should continuously monitor the implementation of the policy regarding assessment feedback, to ensure sufficient and timely feedback is given to students on assessment materials including formative and summative assessments, such as test and examination materials. (Paras. 4.4.4 and 4.4.10)
- 2.6.3 The College should further explore various recruitment and appointment policies, including but not limited to conjoint positions with industry partners, for the recruitment of qualified full-time teaching staff of the Programmes, to ensure the sufficiency and continuity of qualified staffing for each of the Programmes, in particular at the leadership level of each of the Programmes. (Para. 4.5.8)
- 2.6.4 The College should thoroughly consider increasing the number of technical staff in the hiring plan of the College and recruiting more technical staff, such as teaching assistants or demonstrators, to support practical sessions of the Programmes. (Para. 4.5.9)

- 2.6.5 The College should consider recording lectures where possible and making them available to students on the online learning platform after the lectures for the remaining of the semester, to further facilitate student learning and revision. (Para. 4.6.2)
- 2.6.6 The College should continuously monitor the capacity and utilisation of the programme-specific physical resources and space, and regularly review the need to increase the physical resources and space, especially programme-specific laboratories and equipment, in line with student enrolments and potential initiatives that may require more enabling resources or services. (Para. 4.6.3)
- 2.6.7 The College should continue building a stronger alumni network and alumni engagement, for the benefit of the College and students, development of the Programmes and bonding with the industry. (Para. 4.7.3)

BSc, BSc(FBSc) and BSc(BMSc) Programmes

- 2.6.8 The College should continue reviewing and implementing the minimum admission requirements of the BSc, BSc(FBSc) and BSc(BMSc) Programmes, the mechanism and methods for screening candidates on entry, the methods and tools for identifying and assisting students who are at risk of low engagement and weak performance from the beginning of study, and the marketing strategies for attracting more quality-students. (Para. 4.2.3)
- 2.7 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, has been registered under the Post Secondary Colleges Ordinance (Cap. 320) as an Approved Post Secondary College to offer bachelor's degree programmes since 2011.
- 3.2 The BSc(MLSc) and BSc Programmes have been accredited in 2016 and re-accredited in 2017 respectively by HKCAAVQ, with a validity period of five years from 1 September 2017 to 31 August 2022.
- 3.3 TWC commissioned HKCAAVQ to conduct a Learning Programme Accreditation for the BSc(BMSc) programme and a Learning Programme Re-accreditation for the BMSc and BSc(MLSc) programmes. HKCAAVQ formed an expert Panel for this exercise (Panel Membership in **Appendix 1**). In view of the outbreak of the Coronavirus Disease 2019 (COVID-19), the site visit was conducted via video conference from 17 to 19 May 2022 to reduce social contact. 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.
- 3.4 In consideration of the track record established from previous accreditation exercises, information on the following aspects of the programmes was not required in accordance with HKCAAVQ's Differentiation Approach:

Domain of Competence	Information Not Required
LPA-5 Programme Leadership and Staffing	Information on staff development plan is not required.
LPA-6 Learning, Teaching and Enabling Resources / Services	Information on financial 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.

BSc, BSc(FBSc) and BSc(BMSc) Programmes

- 4.1.1 The BSc Programme is hosted by the School of Medical and Health Sciences (MHS) of the College. The Programme consists of two majors, namely (1) Basic Medical Sciences (BSc(BasMSc)), and (2) Forensic Science (BSc(FSc)). The Panel noted the College proposed the following changes to the BSc Programme, and considered the changes appropriate, after reviewing the relevant rationales and information of the Programmes in the accreditation documents and *Response to Initial Comments* and during the site visit discussions with relevant stakeholders of the College.

BSc Programme

- (i) Changing the Programme Area of Study and Training from *Medicine, Dentistry and Health Sciences* to *Sciences*, the Sub-area (Primary Area of Study and Training) from *Health Care* to *Life Sciences*;
- (ii) Revising the Programme Objectives (POs), Programme Intended Learning Outcomes (PILOs), Course Intended Learning Outcomes (CILOs), and the curriculum of the BSc Programme; and
- (iii) Restructuring the BSc Programme, effective from 1 September 2023, by splitting the Basic Medical Sciences major and the Forensic Science major off from the Programme, retitling the Programme from *Bachelor of Medical Science (Honours)* (BSc) to *Bachelor of Science (Honours) in Forensic Biomedical Science* (BSc(FBSc)), and proposing a new Programme *Bachelor of Science (Honours) in Biomedical Science* (BSc(BMSc)) through accreditation in this exercise, such that the BSc title will continue to be used in the academic year 2022/23 only, and will be retitled to BSc(FBSc) and continue to be offered along with the new standalone BSc(BMSc) Programme from the academic year 2023/24 onwards, as below.

AY2022/23	Bachelor of Medical Science (Honours) (with the Basic Medical Sciences major & Forensic Science major)	
AY2023/24 onwards	Bachelor of Science (Honours) in Forensic Biomedical Science (restructured and retitled from BMSc)	Bachelor of Science (Honours) in Biomedical Science (from the restructured BMSc)

4.1.2 The revised Programme Objectives (POs) and Programme Intended Learning Outcomes (PILOs) of the BMSc Programme are as follows:

BMSc Programme Objectives (POs)

The programme objectives are to:

PO1	Provide students with an understanding of the concepts of biomedical and forensic science;
PO2	Develop student's keen interest in Science through critical, creative and problem-solving skills and provide insights into biological science area such as biomedical and forensic science fields;
PO3	Produce graduates that are well equipped with knowledge to pursue further postgraduate professional programmes and/or pursue careers in biomedical and forensic science fields; and
PO4	Enhance students' communication and interpersonal skills (general and professional), understanding and appreciation of other cultures and environments.

BMSc Programme Intended Learning Outcomes (PILOs)

Upon completion of the Programme, students should be able to:

PILO 1	Understand the fundamental tenets of biomedical and forensic sciences and the relationship between individual, society and biological science, including contemporary ethical and legal issues;
PILO 2	Acquire basic knowledge and skills in the design and conducting of experiments, integrating research, and utilizing analytical skills, critical and creative thinking in problem-solving and decision making process;

PILO 3	Develop communication skills, in both Chinese and English, build a solid foundation in general education as well as good social, interpersonal skills, teamwork spirit, life-long and life-wide learning required for effective and professional interaction;
PILO 4	Develop social awareness and understanding of the community value of non-profit organisations in terms of their missions, culture and overall impact and significance in Hong Kong;

Major-specific PILOs for the Basic Medical Sciences major of BMSc (BMSc(BasMSc)):

PILO 5	Understand the molecular, cellular, tissue, organ and system organization of a human body, in healthy or diseased state;
PILO 6	Acquire an in-depth understanding of biology of health and common diseases; and
PILO 7	Demonstrate knowledge and problem-solving skills in addressing health issues with an integrative reasoning approach.

Major-specific PILOs for the Forensic Science major of BMSc (BMSc(FSc)):

PILO 8	Understand the basis of forensic science;
PILO 9	Perform forensic investigations in different scientific disciplines in the legal context; and
PILO 10	Develop skills in crime scene investigation, evidence examination and critical analyses to present a coherent report with underlying sound scientific basis.

4.1.3 To demonstrate that the graduates have effectively achieved the POs and PILOs of the BMSc Programme and that the Programme continues to meet the QF standard at Level 5, the College provided the Panel with the following information which also covers the BSc(FBSc) and BSc(BMSc) Programmes:

- (a) Mapping of the POs to the PILOs;
- (b) Mapping of courses to the PILOs;
- (c) Mapping of the courses to the Generic Level Descriptors (GLDs) at QF Level 4 and 5;

- (d) *Course Description Forms* of the courses, with information such as course objectives, course intended learning outcomes, course indicative syllabus, teaching and learning methods, contact and non-contact hours, assessment methods and references;
- (e) Samples of marked student assessments of courses including *Honours Year Project*, covering high, medium and low performance, with associated marking schemes and assessment rubrics;
- (f) External Examiner's Reports from 2018/19 to 2020/21, External Examiner's Annual Programme Reports from 2020 to 2021, Annual Programme Review Reports from 2017/18 to 2019/20, and Report of Internal Validation Panel (IVP) in 2021; and
- (g) Graduate Survey Reports from 2017/18 to 2020/21.

4.1.4 The Programme Objectives (POs) and Programme Intended Learning Outcomes (PILOs) of the BSc(FBSc) Programme commencing from AY2023/24, after being retitled and restructured from the BMSc Programme, are as follows:

BSc(FBSc) Programme Objectives (POs)

The programme objectives are to:

PO 1	Provide students with an understanding of the concepts of forensic science;
PO 2	Develop student's keen interest in Science through critical, creative and problem-solving skills and provide insights into biological science area such as forensic science fields;
PO 3	Produce graduates who are well equipped with knowledge to pursue further postgraduate professional programmes and/or pursue careers in forensic science fields; and
PO 4	Enhance students' communication and interpersonal skills (general and professional), understanding and appreciation of other cultures and environments.

BSc(FBSc) Programme Intended Learning Outcomes (PILOs)

Upon completion of the programme, students will be able to:

PILO 1	Understand the fundamental tenets of forensic science and the relationship between individual, society and biological science, including contemporary ethical and legal issues;
PILO 2	Acquire basic knowledge and skills in the design and conducting of experiments, integrating research, and utilising analytical skills, critical and creative thinking in problem-solving and decision-making process;
PILO 3	Develop communication skills, in both Chinese and English, build a solid foundation in general education as well as good social, interpersonal skills, teamwork spirit, life-long and life-wide learning required for effective and professional interaction;
PILO 4	Develop social awareness and understanding of the community value of non-profit organisations in terms of their missions, culture and overall impact and significance in Hong Kong;
PILO 5	Understand the basis of forensic science;
PILO 6	Perform forensic investigations in different scientific disciplines in the legal context; and
PILO 7	Develop skills in crime scene investigation, evidence examination and critical analyses to present a coherent report with underlying sound scientific basis.

- 4.1.5 The Programme Objectives (POs) and Programme Intended Learning Outcomes (PILOs) of the proposed BSc(BMSc) Programme, commencing from AY2023/24 and hosted by the School of Medical and Health Sciences (MHS) of the College as a result of the restructure of the BMSc Programme, are as follows:

BSc(BMSc) Programme Objectives (POs)

The programme objectives are to:

PO 1	Provide students with an understanding of the concepts of biomedical science;
PO 2	Develop student's keen interest in Science through critical, creative and problem-solving skills and provide insights into biological science area such as biomedical science fields;
PO 3	Produce graduates who are well equipped with knowledge to pursue further postgraduate professional programmes and/or pursue careers in biomedical science fields; and

PO 4	Enhance students' communication and interpersonal skills (general and professional), understanding and appreciation of other cultures and environments.
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BSc(BMSc) Programme Intended Learning Outcomes (PILOs)

Upon completion of the programme, students will be able to:

PILO 1	Understand the fundamental tenets of biomedical science and the relationship between individual, society and biological science, including contemporary ethical and legal issues;
PILO 2	Acquire basic knowledge and skills in the design and conducting of experiments, integrating research, and utilising analytical skills, critical and creative thinking in problem-solving and decision-making process;
PILO 3	Develop communication skills, in both Chinese and English, build a solid foundation in general education as well as good social, interpersonal skills, teamwork spirit, life-long and life-wide learning required for effective and professional interaction;
PILO 4	Develop social awareness and understanding of the community value of non-profit organisations in terms of their missions, culture and overall impact and significance in Hong Kong;
PILO 5	Understand the molecular, cellular, tissue, organ and system organization of a human body, in healthy or diseased state;
PILO 6	Acquire an in-depth understanding of biology of health and common diseases; and
PILO 7	Demonstrate knowledge and problem-solving skills in addressing health issues with an integrative reasoning approach.

- 4.1.6 The College provided to the Panel the summary information on the employment of graduates from 2017 to 2021, as well as the information on the graduates' profiles of the BMSc Programme (as in **Appendix 2**) and the BSc(BMSc) Programme (as in **Appendix 3**), including the education and employment pathways of the graduates of the Programmes.
- 4.1.7 The Panel noted from the accreditation documents that the College had taken actions to address the recommendations made by HKCAAVQ in the last re-accreditation for the BMSc Programme in 2017, for the purpose of continuous improvement.

- 4.1.8 In consideration of the above information and the discussion with various stakeholders of the College, the Panel formed the view that the BSc Programme has achieved the POs and PILOs as a whole and has met the QF standard at Level 5, the BSc(FBSc) and BSc(BMSc) Programmes have set the objectives that address the education and industry needs with the intended learning outcomes meeting the QF standard at Level 5, and the Programmes are in general fit for purpose in the local context.

BSc(MLSc) Programme

- 4.1.9 The BSc(MLSc) Programme is hosted by the School of Medical and Health Sciences (MHS) of the College. The Programme Objectives (POs) and Programme Learning Outcomes (PILOs) of the Programme are as follows:

BSc(MLSc) Programme Objectives (POs)

The objectives of the Programme are to:

PO1	Provide students with knowledge and skills in clinical and laboratory aspects of modern laboratory medicine;
PO2	Develop students' understanding of all the foundation scientific knowledge and skills for preparing their practice as Medical Laboratory Scientists;
PO3	Provide students with adequate clinical and analytical skills through substantive practical and clinical training sessions/placements, both at the College and in medical laboratories in public and private sectors;
PO4	Enhance students' interpersonal skills, including teamwork and communication skills;
PO5	Develop students' critical and creative thinking as well as analytical and problem solving skills;
PO6	Nurture students' appreciation of value of life and develop their empathy for fellow citizen's health and well-being, thus better-preparing them as a caring professional healthcare provider; and
PO7	Expand students' understanding and appreciation of other cultures and environments.

BSc(MLSc) Programme Intended Learning Outcomes (PILOs)

Upon completion of the Programme, students will be able to:

PILO 1	Apply critical, creative thinking and analytical skills in problem-solving and decision making and use of basic knowledge and skills in integrating research studies, evaluating and utilizing research findings in clinical laboratory practice.
PILO 2	Assess scientific methods and design of experiments to test hypotheses and thereby experience the process of laboratory investigations and technology discovery.
PILO 3	Contribute to the future of the population at large through commitment to life-long and life-wide learning and uphold the ethical, legal and professional standards of medical laboratory practice.
PILO 4	Acquire appropriate foundation knowledge in theory and practice of Medical Laboratory Science according to prescribed laboratory standards set by the Supplementary Medical Professions Council.
PILO 5	Develop the skills in analysis, presentation and interpretation of results of clinical laboratory data in relation to health / disease of individuals.
PILO 6	Demonstrate professionalism by working in accordance with good and safe clinical laboratory practice.
PILO 7	Demonstrate administrative skills consistent with philosophies of quality assurance, laboratory education, client relations and resource management.
PILO 8	Apply the fundamental tenets of medical science including, but not limited to, human biology, microbiology, medical physics, statistics taking into account the relationship between medicine, individual and society, including contemporary ethical and legal issues in animal and human research.
PILO 9	Demonstrate effective communication skills and be proficient in both Chinese and English, acquire a solid foundation in general education as well as good social, interpersonal skills and teamwork spirit.
PILO 10	Demonstrate social awareness and understanding of the community roles and value of non-profit organizations in terms of their missions, culture and overall impact and significance in Hong Kong.

4.1.10 To demonstrate that the graduates have effectively achieved the POs and PILOs of the BSc(MLSc) Programme and that the Programme continues to meet the QF standard at Level 5, the College provided the following information to the Panel for review:

- (a) Mapping of the POs to the PILOs;
- (b) Mapping of courses to the PILOs;
- (c) Mapping of the courses to the Generic Level Descriptors (GLDs) at QF Level 4 and 5;
- (d) *Course Description Forms* of the courses, with information such as course objectives, course intended learning outcomes, course indicative syllabus, teaching and learning methods, contact and non-contact hours, assessment methods and references;
- (e) Samples of marked student assessments of courses including *Honours Year Project in Medical Laboratory Science*, covering high, medium and low performance, with associated marking schemes and assessment rubrics;
- (f) External Examiner's Reports and External Examiner's Annual Programme Reports from 2017/18 to 2020/21, Annual Programme Review Reports from 2017/18 to 2020/21, and Report of Internal Validation Panel (IVP) in 2021; and
- (g) Graduate Survey Reports from 2017/18 to 2020/21.

4.1.11 The Panel was informed that the Programme has been accredited by the Medical Laboratory Technologists Board (MLTB) of the Supplementary Medical Professions Council (SMPC), the validity period is still on-going, and graduates of the Programme are eligible to apply for Medical Laboratory Technologist (MLT) Part II registration after fulfilling the relevant requirements. The College is required to comply with the restriction below stipulated by the Panel, and report to HKCAAVQ when there are any changes of the accreditation status by the MLTB.

Restriction

The College is to ensure that the Bachelor of Science (Honours) in Medical Laboratory Science programme maintains its professional recognition by the Medical Laboratory Technologists Board throughout the validity period as approved by HKCAAVQ.

- 4.1.12 The College provided to the Panel the summary information on the employment of graduates from 2017 to 2021, as well as the information on the graduates' profile of the Programme (as in **Appendix 4**), including the education and employment pathways of the graduates.
- 4.1.13 The Panel noted from the accreditation documents that the College had taken actions to address the recommendations made by HKCAAVQ in the accreditation for the BSc(MLSc) Programme in 2016, for the purpose of continuous improvement.
- 4.1.14 In consideration of the above information and the discussion with various stakeholders of the College, the Panel formed the view that the BSc(MLSc) Programme has achieved the POs and PILOs as a whole and has met the QF standard at Level 5, and the Programme is in general fit for purpose in the local context.

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.

All Programmes

- 4.2.1 The Panel noted that the BMSc, BSc(BMSc), BSc(FBSc) and BSc(MLSc) Programmes follow the College's policies regarding student admission. The minimum admission requirements of all Programmes are outlined below.

Year 1 entry

- (a) Have obtained Level 3 in Chinese Language and English Language and Level 2 in Mathematics and Liberal Studies plus one Elective/Applied Learning Subject at Level 2 ("3322+2") in HKDSE; or
- (b) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/two AS subjects in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or
- (c) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 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
- (d) 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) 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); or
- (e) Have obtained equivalent qualifications; or
- (f) Have reached the age of 25 years old or above with a minimum of 3 years’ relevant work experience (for non-standard admission to BMSc, BSc(BMSc), BSc(FBSc) only).

Year 3 entry (for BMSc, BSc(BMSc), BSc(FBSc) only)

- (a) Have completed an Associate Degree (AD) or a Higher Diploma (HD) programme in a relevant subject/discipline; or
- (b) Have obtained equivalent qualifications.

Note: For BSc(MLSc), preference will be given to candidates who have obtained (i) Grade 3 or better in Higher Level Chemistry; and/or (ii) Level 4 or above for Chemistry or Combined Science with Chemistry in HKDSE; and/or (iii) Level 4 or above in English Language in HKDSE.

(Remark: For BMSc, BSc(BMSc), BSc(FBSc), Interview and written test are arranged for admission purposes.)

BMSc, BSc(FBSc) and BSc(BMSc) Programmes

- 4.2.2 The College provided the Panel with the profiles of the admitted students, attrition rates and graduation rates of the cohorts of the BMSc Programme from 2017/18 to 2020/21. The Panel noted that no students were admitted to the Programme through the non-standard entry route during the validity period, which is in line with HKCAAVQ's policy on the yearly quota of non-standard admission for its accredited programmes that 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.
- 4.2.3 When reviewing information on the admitted students of the BMSc Programme, admission requirements, mean grade point achieved (GPA), attrition rates and probation, the Panel observed that some students did not enter the Programme with a strong science background, for example, with both Chemistry and Biology in HKDSE, and that student performance was weaker in the first and second years of study. The Panel noted that admission interview and written test have been used for screening of candidates and admission purposes. The Panel **recommended** that the College should continue reviewing and implementing the minimum admission requirements of the BMSc, BSc(FBSc) and BSc(BMSc) Programmes, the mechanism and methods for screening candidates on entry, the methods and tools for identifying and assisting students who are at risk of low engagement and weak performance from the beginning of study, and the marketing strategies for attracting more quality-students.

- 4.2.4 The College provided to the Panel the yearly student intake of the BSc Programme from 2017/18 to 2021/22, and proposed the maximum numbers of new students per year of the BSc, BSc(FBSc) and BSc(BSc) Programmes below. The Panel considered the proposed maximum numbers of new students appropriate.

BSc Programme (for AY2022/23)

Year-1 Entry (Full-time): 50 new students per year

Year-3 Entry (Full-time): 25 new students per year

BSc(FBSc) Programme (from AY2023/24 onwards)

Year-1 Entry (Full-time): 20 new students per year

Year-3 Entry (Full-time): 15 new students per year

BSc(BSc) Programmes (from AY2023/24 onwards)

Year-1 Entry (Full-time): 20 new students per year

Year-3 Entry (Full-time): 15 new students per year

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

BSc(MLSc) Programme

- 4.2.6 The College provided the Panel with the profiles of the admitted students, attrition rates and graduation rates of the cohorts of the Programme from 2017/18 to 2021/22. The Panel noted that no students were admitted to the Programme through the non-standard entry route during the validity period, which is in line with HKCAAVQ's policy on the yearly quota of non-standard admission for its accredited programmes that 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.
- 4.2.7 The College provided to the Panel the yearly student intake of the Programme from 2017/18 to 2021/22, and proposed the maximum number of new students per year as 45 new students for Year-1 entry. The Panel considered the proposed maximum number of new students appropriate.

- 4.2.8 In consideration of the above information, the Panel formed the view that the minimum admission requirements have been in general 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.

All Programmes

- 4.3.1 The graduation requirements of the BMSc, BSc(FBSc), BSc(BMSc) and BSc(MLSc) Programmes, following the College's college-wide graduation requirements, are as follows:

- (a) Have completed the minimum required credit units as prescribed for the Programme with a Graduation Grade Point Average (gGPA) of at least 2.0;
- (b) Have achieved GPA of 1.0 or above in all courses in the Programme;
- (c) Have satisfied the requirements of the graduation project / internship / practicum, if any, as prescribed for the academic programme;
- (d) Have completed the Work-Integrated Learning Programme (WILP) / Co-operative Education Scheme / Community Service Programme required by the Programme; and
- (e) Have attained a valid score of 6.0 in IELTS Academic or equivalent.

Note: To fulfil the College's WILP requirements and to graduate, the students must have:

- (a) completed 480 hours of discipline-related internship;
- (b) submitted a post-internship reflective paper (800-1200 words) to the Student Academic Advisor (SAA); and
- (c) attended four College seminars per academic year.

BMSc, BSc(FBSc) and BSc(BMSc) Programmes

- 4.3.2 The BMSc, BSc(FBSc) and BSc(BMSc) Programmes are four-year full-time degree programmes. The Basic Medical Sciences major of the BMSc Programme (BMSc(BasMSc)) and the BSc(BMSc) Programme comprise 28 discipline courses, 5 general education courses and 6 language courses, amounted to 120 TWC credits and 571 QF credits. The Forensic Science major of the BMSc Programme (BMSc(FSc)) and the BSc(FBSc) Programme comprise 29 discipline courses, 5 general education courses and 6 language courses, amounted to 121 TWC credits and 575 QF credits. The distribution of categories of courses and TWC credits are tabulated below.

Courses by Category

Category	Programme	No. of Courses	No. of TWC Credits	% of TWC Credits
Discipline	BMSc(BasMSc) / BSc(BMSc)	28	87	72.5%
	BMSc(FSc) / BSc(FBSc)	29	88	72.7%
Language	BMSc(BasMSc) / BSc(BMSc)	6	18	15%
	BMSc(FSc) / BSc(FBSc)	6	18	14.9%
General Education (GE)	BMSc(BasMSc) / BSc(BMSc)	5	15	12.5%
	BMSc(FSc) / BSc(FBSc)	5	15	12.4%
Total	BMSc(BasMSc) / BSc(BMSc)	39	120	100%
	BMSc(FSc) / BSc(FBSc)	40	121	100%

Courses by Year

Year of Study	Programme	No. of Discipline Courses	No. of Language Courses	No. of GE Courses	Total
Year 1	BMSc(BasMSc) / BSc(BMSc)	6	2	2	10
	BMSc(FSc) / BSc(FBSc)	6	2	2	10
Year 2	BMSc(BasMSc) / BSc(BMSc)	8	2	1	11
	BMSc(FSc) / BSc(FBSc)	9	2	1	12

Year 3	BMSc(BasMSc) / BSc(BMSc)	8.5	1	2	11.5
	BMSc(FSc) / BSc(FBSc)	8.5	1	1	10.5
Year 4	BMSc(BasMSc) / BSc(BMSc)	5.5	1	-	6.5
	BMSc(FSc) / BSc(FBSc)	5.5	1	1	7.5
Total	BMSc(BasMSc) / BSc(BMSc)	28	6	5	39
	BMSc(FSc) / BSc(FBSc)	29	6	5	40

- 4.3.3 When reviewing the progression of the Programmes and students, the Panel observed from the accreditation documents and the *Response to Initial Comments* that the attrition rates and the numbers of probation of the BMSc Programme from 2017/18 to 2021/22 (Semester 1) were on the high side, and that the withdrawal and probation cases were mostly in the first year of study, which the College attributed to possibly students' transfer to other institutions and overseas study, and students' adaption and adjustment during the transition from secondary school education to self-directed learning in tertiary education, respectively. The Panel noted the College has provided supportive services to improve students' adaptation to a new learning environment and discipline, such as senior students as peer mentors in a Peer Mentorship Programme and academic staff as Student Academic advisors (SAA). The Panel **recommended** that the College should consider further developing students' interest in the discipline right from the first year of study by introducing more discipline-specific knowledge, employability skills and training, for example, through a course which builds students' industry awareness, employability skills and job-readiness which can be built on throughout the curriculum, to enhance students' interest in the discipline and independent learning in tertiary education and to relieve the attrition rate and number of academic probation.
- 4.3.4 Notwithstanding the recommendation above, the Panel had the view that the structure and content of the BMSc, BSc(FBSc) and BSc(BMSc) Programmes have been effective in enabling students to achieve the stated learning outcomes and meet the programme objectives.

BSc(MLSc) Programme

- 4.3.5 The Programme is a four-year full-time degree programme for training medical laboratory technologists. The Programme comprises 31 discipline courses, 4 general education courses and 5 language courses, amounted to 135 TWC credits and 842 QF credits. The distribution of categories of courses and TWC credits are tabulated below.

Courses by Category

Category	No. of Courses	No. of TWC Credits	% of TWC Credits
Discipline	31	108	80.0
Language	5	15	11.1
General Education (GE)	4	12	8.9
Total	40	135	100%

Courses by Year

	No. of Discipline Courses	No. of Language Courses	No. of GE Courses	Total
Year 1	7	2	3	12
Year 2	11	1	-	12
Year 3	6	2	1	9
Year 4	7	-	-	7
Total	31	5	4	40

- 4.3.6 The Panel noted that students must complete and pass 480 hours of clinical practicum in the following four practicum courses:

- *Clinical Practicum I (Clinical Chemistry)*
- *Clinical Practicum II (Haematology and Transfusion Science)*
- *Clinical Practicum III (Anatomical and Cellular Pathology)*
- *Clinical Practicum IV (Medical Microbiology)*

- 4.3.7 The Panel observed that the *Clinical Laboratory Chemistry and Immunochemistry* and *Clinical Laboratory Haematology and Transfusion Science* courses are year-courses, conducted in parallel in Year-2 Semester 2 and Year-3 Semester 1, and the Panel learnt the relevant rationale in the *Response to Initial Comments*. The Panel **advised** the College to review the parallel arrangement of the *Clinical Laboratory Chemistry and Immunochemistry* and *Clinical Laboratory Haematology and Transfusion Science* courses, monitor students' performance throughout the courses and provide timely and appropriate assistance to weaker students who encounter difficulties in the two courses.

- 4.3.8 When reviewing the progression of the Programme and students such as the information on attrition, probation and graduation, the Panel noted as informed by the College that some students adapted a relaxing learning attitude leading to slow academic progression during the transition from secondary school education to self-directed learning in tertiary education. The Panel **recommended** that the College should consider further developing students' interest in the discipline right from the first year of study by introducing more discipline-specific knowledge, employability skills and training, for example, through a course which builds students' industry awareness, employability skills and job-readiness which can be built on throughout the curriculum, to enhance students' interest in the discipline and independent learning in tertiary education and to relieve the attrition rate and number of academic probation.
- 4.3.9 Notwithstanding the recommendation above, the Panel had the view that the structure and content of the BSc(MLSc) Programme have been effective in enabling students to achieve the stated learning outcomes and meet the programme objectives.

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.

BMSc, BSc(FBSc) and BSc(BMSc) Programmes

- 4.4.1 The BMSc, BSc(FBSc) and BSc(BMSc) Programmes employ a range of teaching and learning activities, such as lectures, seminars, tutorials, project work, problem-based learning, case studies, laboratory sessions, and *Work-Integrated Learning Programme (WILP)*. The medium of instruction of the Programmes is English except for Chinese language, Chinese medicine and Chinese culture courses, and other language courses. 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 In the accreditation documents and *Response to Panel's Initial Comments*, the College provided the Panel with samples of teaching and learning materials, assessment tasks (including formative and summative assessments) and associated assessment criteria / rubrics, of the following courses of the two majors and the Programmes:

- *Human Physiology*
- *Human Anatomy*
- *Chemical Skills for Forensic Science*
- *Pathophysiology*
- *Pharmacology*
- *Human Genetics*
- *Advanced Pathology*
- *Clinical Immunology*
- *Introduction to Criminal Justice*
- *Honours Year Project*

4.4.3 In terms of assessment, a range of methods have been adopted in the Programme, including individual and group assignments, practical tests, laboratory reports, presentations, projects, written tests and examinations, etc. The comments of the External Examiners on the courses indicated that the assessment and the marking have been in general appropriate. Having reviewed the distribution of honours classifications of graduates from 2017/18 to 2020/21, mean grade point achieved (GPA) by student cohorts from 2017/18 to 2020/21, passing rates of courses from 2017/18 to 2020/21, assessment plans, and samples of marked student assessments of the courses below along with the associated assessment papers, marking schemes and assessment rubrics, the Panel formed the view that the assessments have been able to assess students' achievement of the intended learning outcomes and the standard at QF Level 5.

- *Human Physiology*
- *Human Anatomy*
- *Chemical Skills for Forensic Science*
- *Pathophysiology*
- *Pharmacology*
- *Human Genetics*
- *Advanced Pathology*
- *Computer Forensics and Digital Investigations*
- *Epidemiology*
- *Honours Year Project*

- 4.4.4 When reviewing the samples of assessment materials and discussing with students, graduates and teaching staff of the College, the Panel observed that feedback was not given to students in some examinations or tests in some courses. The Panel **recommended** that the College should continuously monitor the implementation of the policy regarding assessment feedback, to ensure sufficient and timely feedback is given to students on assessment materials including formative and summative assessments, such as test and examination materials.
- 4.4.5 The Panel was provided with the summary information and results of Course and Teaching Evaluation (CTE) questionnaire for the discipline courses of the BSc Programme from 2017/18 to 2020/21, and student feedback has been collected in the regular Staff-Student Consultative Committee (SSCC) meetings during the validity period.
- 4.4.6 Notwithstanding the recommendation above, the Panel considered that the learning, teaching and assessment activities of the BSc, BSc(FBSc) and BSc(BMSc) Programmes have been in general effective in delivering the programme content and assessing students' attainment of the intended learning outcomes.

BSc(MLSc) Programme

- 4.4.7 The Programme employs a range of teaching and learning activities, such as lectures, seminars, tutorials, project work, laboratory sessions, practicum, and *Work-Integrated Learning Programme (WILP)*. The medium of instruction of the Programmes is English except for Chinese language, Chinese medicine and Chinese culture courses, and other language courses. 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.
- 4.4.8 In the accreditation documents and *Response to Panel's Initial Comments*, the College provided the Panel with samples of teaching and learning materials, assessment tasks (including formative and summative assessments), and samples of marked student assessments of the courses below along with the associated assessment papers, marking schemes and assessment criteria / rubrics, of the following courses:
- *Human Anatomy*
 - *General Pathology*

- *Clinical Laboratory Chemistry and Immunochemistry*
- *Clinical Laboratory Haematology and Transfusion Science*
- *Clinical Laboratory Cellular Pathology*
- *Clinical Laboratory Medical Microbiology*
- *Molecular Diagnosis of Human Diseases*
- *Honours Year Project in Medical Laboratory Science*

4.4.9 The Panel noted that a range of methods has been adopted in the Programme, including individual and group assignments, laboratory reports, presentations, projects, practical tests, written tests and examinations, etc. The comments of the External Examiners on the courses indicated that the assessment and the marking have been in general appropriate. Having reviewed the distribution of honours classifications of graduates of the 2017/18 cohort, mean grade point achieved (GPA) by student cohorts from 2017/18 to 2021/22 (Semester 1), passing rates of courses from 2017/18 to 2020/21, assessment plans, clinical practicum handbooks, and samples of marked student assessments, the Panel formed the view that the assessments have been able to assess students' achievement of the intended learning outcomes and the standard at QF Level 5.

4.4.10 When reviewing samples of assessment materials and discussing with students, graduates and teaching staff of the College, the Panel observed that feedback was not given to students in some examinations or tests in some courses. The Panel **recommended** that the College should continuously monitor the implementation of the policy regarding assessment feedback, to ensure sufficient and timely feedback is given to students on assessment materials including formative and summative assessments, such as test and examination materials.

4.4.11 The Panel was provided with summary information and results of Course and Teaching Evaluation (CTE) questionnaire for the discipline courses of the Programme from 2017/18 to 2020/21, and student feedback has been collected in the regular Staff-Student Consultative Committee (SSCC) meetings during the validity period.

4.4.12 Notwithstanding the recommendation above, the Panel considered that the learning, teaching and assessment activities of the BSc(MLSc) Programme have been 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.

BMSc, BSc(FBSc) and BSc(BMSc) Programmes

- 4.5.1 The College sets an academic Staff-to-Student ratio (SSR) at normally 1:25 for degree and sub-degree programmes in order to ensure that the programmes are delivered with quality. The Panel observed that the SSR of the BMSc Programme ranged from 18 to 23.3 from 2019/20 to 2021/22, despite the relatively higher SSR in 2017/18. The Panel was informed that the College would try to maintain the overall SSR at 1:20 for the Programmes, and that two additional full-time headcounts at the rank of Associate Professor and Assistant Professor had been approved for the BMSc, BSc(BMSc) and BSc(FBSc) Programmes and the two new academic staff, one in biomedical science and one in forensic science, are expected to join the Programmes by September 2022, as well as an additional full-time technical staff for the Programmes.
- 4.5.2 The College provided the Panel with the information on the numbers and profiles of the full-time and part-time academic staff of the Programme from 2017/18 to 2021/22, as well as the staffing plan for the BMSc, BSc(FBSc) and BSc(BMSc) Programmes for the coming five years. The Panel reviewed the profiles of the management staff and teaching staff of the Programmes and considered that they have relevant qualifications and experience to manage and teach the Programmes.
- 4.5.3 In terms of staff development, the College provided to the Panel summary information on staff development activities, research funding, and research and conference publications of the teaching staff of the BMSc Programme during the validity period.

BSc(MLSc) Programme

- 4.5.4 The College sets an academic Staff-to-Student ratio (SSR) at normally 1:25 for degree and sub-degree programmes in order to ensure that the programmes are delivered with quality. The Panel

observed that the SSR of the Programme ranged from 11 to 19 from 2017/18 to 2021/22. The Panel was informed that the College would try to maintain the overall SSR at 1:15 for the Programme.

- 4.5.5 The College provided the Panel with the information on the numbers and profiles of the academic staff of the Programme from 2017/18 to 2021/22, as well as the staffing plan for the Programme for the coming five years. The Panel reviewed the profiles of the management staff and teaching staff of the Programme and considered that they have relevant qualifications and experience to manage and teach the Programme. In the *Response to Initial Comments* and discussions with various stakeholders of the College during the site visit, the Panel noted that the College has implemented succession planning to identify and groom potential academic staff to become leaders of the Programme, and that the recruitment of Professor-rank staff which had commenced and the recruitment of other academic staff for the replacement of leaving staff are expected to complete before the academic year 2022/23 begins.
- 4.5.6 The Panel was informed that the Programme which has been accredited by the Medical Laboratory Technologists Board (MLTB) has complied with one of the requirements set by the MLTB that the Programme has to engage at least one clinical teacher for each of four major disciplines which are (i) Clinical Chemistry, (ii) Haematology and Transfusion Science, (iii) Anatomical Pathology, and (iv) Medical Microbiology.
- 4.5.7 In terms of staff development, the College provided to the Panel summary information on staff development activities, external funding and research projects, and publications of the teaching staff of the Programme during the validity period.

All Programmes

- 4.5.8 In reviewing the accreditation documents, *Response to Initial Comments* and discussions with stakeholders of the College during the site visit, the Panel observed that the recruitment of various levels of teaching staff for the Programmes had been challenging, and the College had been conducting recruitment activities to attract talents and to maintain sufficient qualified full-time teaching staff for the Programmes. The Panel **recommended** that the College should further explore various recruitment and appointment policies, including but not limited to conjoint positions with industry partners, for the recruitment of qualified full-time teaching staff of the

Programmes, to ensure the sufficiency and continuity of qualified staffing for each of the Programmes, in particular at the leadership level of each of the Programmes.

- 4.5.9 In reviewing the accreditation documents, *Response to Initial Comments* and discussions with stakeholders of the College during the site visit, the Panel observed that the numbers of technical staff for each Programme, particularly the technicians supporting laboratory classes, had been tight and limited, and that the technical staff had been shared among various programmes of the College. The Panel **recommended** that the College should thoroughly consider increasing the number of technical staff in the hiring plan of the College and recruiting more technical staff, such as teaching assistants or demonstrators, to support practical sessions of the Programmes.
- 4.5.10 Notwithstanding the recommendations 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 BSc, BSc(FBSc), BSc(BMSc) and BSc(MLSc) 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.

All Programmes

- 4.6.1 The College provided to the Panel information on its learning, teaching and enabling resources relevant to the delivery of the BSc, BSc(FBSc), BSc(BMSc) and BSc(MLSc) Programmes, besides the general teaching and learning facilities, including Clinical Chemistry Laboratory, Life Science Laboratory, Anatomy and Physiology Laboratory, Medical Microbiology Laboratory, Chemistry Laboratory / Anatomical Pathology Laboratory, Molecular Diagnosis Laboratory, Haematology and Molecular Biology Laboratory, as well as specialised facilities and equipment for the Programmes, together with the relevant quantities, utilisation rates and capacities. The College provided the Panel with a virtual tour of the programme-specific teaching and learning facilities, as well as summary

information of library holdings, e-databases, e-journals, and other e-resources relevant to the Programmes.

- 4.6.2 During the discussions with students, graduates and teaching staff in the site visit, the Panel noted that some but not all lectures were recorded and available on the College's online learning platform afterwards for revision. The Panel **recommended** that the College should consider recording lectures where possible and making them available to students on the online learning platform after the lectures for the remaining of the semester, to further facilitate student learning and revision.
- 4.6.3 The Panel noted from the accreditation documents and discussion with relevant stakeholders of the Programmes that the laboratories and programme-specific facilities and equipment which have mostly been shared with other programmes of the College have been heavily utilised, especially those for students' work for the *Honours Year Project* and *Honours Year Project in Medical Laboratory Science*. The Panel **recommended** that the College should continuously monitor the capacity and utilisation of the programme-specific physical resources and space, and regularly review the need to increase the physical resources and space, especially programme-specific laboratories and equipment, in line with student enrolments and potential initiatives that may require more enabling resources or services. The Panel also **advised** the College to consider using virtual reality to assist teaching and learning involving various equipment.
- 4.6.4 In consideration of the above information, the information in the *Response to Initial Comments* and discussions during the site visit, the Panel considered that the College has provided in general appropriate and sufficient learning, teaching and enabling resources for the delivery of the BMSc and BSc(MLSc) Programmes and is able to do so for the delivery of the BSc(FBSc) and BSc(BMSc) Programmes, notwithstanding the recommendations above.

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.

All Programmes

- 4.7.1 The College provided to the Panel the following information about the BSc, BSc(FBSc), BSc(BMSc) and BSc(MLSc) Programmes to demonstrate that the Programmes are monitored and reviewed on an on-going basis:
- (a) Extracts of meeting minutes of School Board, Academic Board, Management Board, Quality Assurance Committee, and Staff-Student Consultative Committee (SSCC);
 - (b) Summary information and results of the Course and Teaching Evaluation (CTE) questionnaire for the discipline courses, and student feedback collected in SSCC meetings;
 - (c) Passing rate of courses, attrition rate, and distribution of honours classifications of graduates;
 - (d) Graduate Survey Reports;
 - (e) External Examiners' Reports and External Examiner's Annual Programme Reports;
 - (f) Annual Programme Review Reports;
 - (g) Report of Internal Validation Panel (IVP) in 2021;
 - (h) Quality Assurance Manual.
- 4.7.2 The Panel noted that the College had obtained external inputs in developing the Programmes and through its internal quality assurance mechanism involving relevant boards and committees such as School Board, Academic Board, Quality Assurance Committee, and Programme Management Committee. During the site visit meetings with the external stakeholders of the Programmes, the Panel learnt about their engagement and dedication to the Programmes such as members of Programme Advisory Committee, External Examiners, industry advisors, and members of the Internal Validation Panel. The Panel **advised** the College to continue actively engaging with a wide range of external stakeholders on a regular basis, to obtain constructive inputs and advice for the improvement and development of the Programmes and maintaining good bonding with the industry.

- 4.7.3 The Panel noted that the College had commenced to establish alumni networks for the Programmes. The Panel **recommended** that the College should continue building a stronger alumni network and alumni engagement, for the benefit of the College and students, development of the Programmes and bonding with the industry.
- 4.7.4 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 Programmes 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.hkgf.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.

Tung Wah College

**Learning Programme Accreditation for
Bachelor of Science (Honours) in Biomedical Science; and
Learning Programme Re-accreditation for
Bachelor of Medical Science (Honours) and
Bachelor of Science (Honours) in Medical Laboratory Science**

17 - 19 May 2022

Panel Membership

Panel Chair

Professor Philip Marcus BODMAN
Emeritus Professor
Faculty of Business, Economics and Law
The University of Queensland
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* The Panel Secretary is also a member of the Accreditation Panel.

Appendix 2

Graduate Profile of Bachelor of Medical Science (Honours)

Qualification Title	Bachelor of Medical Science (Honours) 醫療科學（榮譽）學士
Qualification Type	Bachelor's Degree
QF Level	Level 5
Primary Area of Study and Training	Sciences
Sub-area (Primary Area of Study and Training)	Life Sciences
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable
Programme Objectives	The programme objectives are: 1. Provide students with an understanding of the concepts of biomedical and forensic science; 2. Develop student's keen interest in Science through critical, creative and problem-solving skills and provide insights into biological science area such as biomedical and forensic science fields; 3. Produce graduates that are well equipped with knowledge to pursue further postgraduate professional programmes and/or pursue careers in biomedical and forensic science fields; and 4. Enhance students' communication and interpersonal skills (general and professional), understanding and appreciation of other cultures and environments.
Programme Intended Learning Outcomes	Upon completion of the Programme, students should be able to: 1. Understand the fundamental tenets of biomedical and forensic sciences and the relationship between individual, society and biological science, including contemporary ethical and legal issues; 2. Acquire basic knowledge and skills in the design and conducting of experiments, integrating research, and utilizing analytical skills, critical and

	creative thinking in problem-solving and decision making process; 3. Develop communication skills, in both Chinese and English, build a solid foundation in general education as well as good social, interpersonal skills, teamwork spirit, life-long and life-wide learning required for effective and professional interaction; 4. Develop social awareness and understanding of the community value of non-profit organisations in terms of their missions, culture and overall impact and significance in Hong Kong; Major-specific PILOs for the Basic Medical Sciences major: 5. Understand the molecular, cellular, tissue, organ and system organization of a human body, in healthy or diseased state; 6. Acquire an in-depth understanding of biology of health and common diseases; and 7. Demonstrate knowledge and problem-solving skills in addressing health issues with an integrative reasoning approach. Major-specific PILOs for the Forensic Science major: 8. Understand the basis of forensic science; 9. Perform forensic investigations in different scientific disciplines in the legal context; and 10. Develop skills in crime scene investigation, evidence examination and critical analyses to present a coherent report with underlying sound scientific basis.
Education Pathways	Graduates of the Programme should be able to pursue further study in postgraduate programmes such as • Master of Medical Science, The University of Hong Kong • Master of Biomedical Science, HKU School of Professional and Continuing Education • Master of Science in Biochemical & Biomedical Science, The Chinese University of Hong Kong • Master's degree in Public Health, The University of Hong Kong & The Chinese University of Hong Kong • Master of Science in Medical Laboratory Science,

	The Chinese University of Hong Kong • Master of Science in Occupational Therapy, University of Essex, UK • Master of Science in Forensic Science, University of Florida, USA • Masters in Physiotherapy, University of Sydney, Australia • Bachelor of Veterinary Medicine and Surgery, University of Edinburgh, UK • Doctor of Medicine graduate entry, University of Sydney, Australia Graduates of the Programme will have opportunities to register for research postgraduate degree programmes as they will have the attributes of fundamental laboratory skills, an inquisitive mind and problem-solving skills.
Employment Pathways	Graduates of the Basic Medical Sciences major of the Programme will have ample opportunities to enter the workforce as: • pre-professional students who can become eligible to enter Medicine, Dentistry, Veterinary Science, Chiropractry and Chinese Medicine in the region or overseas though they may also pursue research degrees (MPhil and PhD) to enter academic careers • Clinic Assistants in private laboratories • Laboratory Assistants in Hospital Authority and private laboratories • Research Assistants / Associates at Hong Kong Science Park Graduates of the Forensic Science major of the Programme will have ample opportunities to enter the workforce as: • Laboratory Assistants / Clerks at laboratories • Investigators, Crime Laboratory, Hong Kong Police Force • Customs Officers, Hong Kong Customs and Excise Department • Officers, Agriculture, Fisheries and Conservation Department • Testing Officers, SGS laboratories

	• Sales representatives, Biotech companies
Minimum Admission Requirements	<u>Year 1 entry (standard admission)</u> (a) Have obtained Level 3 in Chinese Language and English Language and Level 2 in Mathematics and Liberal Studies plus one Elective/Applied Learning Subject at Level 2 ("3322+2") in HKDSE; or (b) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/two AS subjects in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or (c) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 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 (d) 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) 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); or (e) Have obtained equivalent qualifications; or (f) Have reached the age of 25 years old or above with a minimum of 3 years’ relevant work experience (for non-standard admission only). <u>Year 3 entry</u> (a) Have completed an Associate Degree (AD) or a Higher Diploma (HD) programme in a relevant subject/discipline; or (b) Have obtained equivalent qualifications.

	Remark: Interview and written test are arranged for admission purposes.
Operator	Tung Wah College 東華學院

**Graduate Profile of
Bachelor of Science (Honours) in Biomedical Science**

Qualification Title	Bachelor of Science (Honours) in Biomedical Science 生物醫學（榮譽）理學士
Qualification Type	Bachelor's Degree
QF Level	Level 5
Primary Area of Study and Training	Sciences
Sub-area (Primary Area of Study and Training)	Life Sciences
Other Area of Study and Training	Not applicable
Sub-area (Other Area of Study and Training)	Not applicable
Programme Objectives	The programme objectives are: 1. Provide students with an understanding of the concepts of biomedical science; 2. Develop student's keen interest in Science through critical, creative and problem-solving skills and provide insights into biological science area such as biomedical science fields; 3. Produce graduates who are well equipped with knowledge to pursue further postgraduate professional programmes and/or pursue careers in biomedical science fields; and 4. Enhance students' communication and interpersonal skills (general and professional), understanding and appreciation of other cultures and environments.
Programme Intended Learning Outcomes	Upon completion of the programme, students will be able to: 1. Understand the fundamental tenets of biomedical science and the relationship between individual, society and biological science, including contemporary ethical and legal issues;

	2. Acquire basic knowledge and skills in the design and conducting of experiments, integrating research, and utilising analytical skills, critical and creative thinking in problem-solving and decision-making process; 3. Develop communication skills, in both Chinese and English, build a solid foundation in general education as well as good social, interpersonal skills, teamwork spirit, life-long and life-wide learning required for effective and professional interaction; 4. Develop social awareness and understanding of the community value of non-profit organisations in terms of their missions, culture and overall impact and significance in Hong Kong; 5. Understand the molecular, cellular, tissue, organ and system organization of a human body, in healthy or diseased state; 6. Acquire an in-depth understanding of biology of health and common diseases; and 7. Demonstrate knowledge and problem-solving skills in addressing health issues with an integrative reasoning approach.
Education Pathways	Graduates of the Programme should be able to pursue further study in postgraduate programmes such as: • Master of Medical Science, The University of Hong Kong • Master of Biomedical Science, HKU School of Professional and Continuing Education • Master of Science in Biochemical & Biomedical Science, The Chinese University of Hong Kong • Master's degree in Public Health, The University of Hong Kong & The Chinese University of Hong Kong • Master of Science in Medical Laboratory Science, The Chinese University of Hong Kong • Master of Science in Occupational Therapy, University of Essex, UK • Master of Science in Forensic Science, University of Florida, USA. • Masters in Physiotherapy, University of Sydney, Australia.

	• Bachelor of Veterinary Medicine and Surgery, University of Edinburgh, UK • Doctor of Medicine graduate entry, University of Sydney, Australia. Graduates of Programme will also have opportunities to register for research postgraduate degree programmes as they will have the attributes of fundamental laboratory skills, an inquisitive mind and problem-solving skills.
Employment Pathways	Graduates will have ample opportunities to enter the workforce as: • pre-professional students who can become eligible to enter Medicine, Dentistry, Veterinary Science, Chiropractry and Chinese Medicine in the region or overseas though they may also pursue research degrees (MPhil and PhD) to enter academic careers • Clinic Assistants in private laboratories • Laboratory Assistants in Hospital Authority and private laboratories • Research Assistants / Associates at Hong Kong Science Park
Minimum Admission Requirements	<u>Year 1 entry (standard admission)</u> (a) Have obtained Level 3 in Chinese Language and English Language and Level 2 in Mathematics and Liberal Studies plus one Elective/Applied Learning Subject at Level 2 ("3322+2") in HKDSE; or (b) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/two AS subjects in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or (c) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 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 (d) 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) 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); or (e) Have obtained equivalent qualifications; or (f) Have reached the age of 25 years old or above with a minimum of 3 years’ relevant work experience (for non-standard admission only). <u>Year 3 entry</u> (a) Have completed an Associate Degree (AD) or a Higher Diploma (HD) programme in a relevant subject/discipline; or (b) Have obtained equivalent qualifications. Remark: Interview and written test are arranged for admission purposes.
Operator	Tung Wah College 東華學院

Appendix 4

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

Qualification Title	Bachelor of Science (Honours) in Medical Laboratory Science 醫療化驗科學（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. Provide students with knowledge and skills in clinical and laboratory aspects of modern laboratory medicine; 2. Develop students' understanding of all the foundation scientific knowledge and skills for preparing their practice as Medical Laboratory Scientists; 3. Provide students with adequate clinical and analytical skills through substantive practical and clinical training sessions/placements, both at the College and in medical laboratories in public and private sectors; 4. Enhance students' interpersonal skills, including teamwork and communication skills; 5. Develop students' critical and creative thinking as well as analytical and problem solving skills; 6. Nurture students' appreciation of value of life and develop their empathy for fellow citizen's health and well-being, thus better-preparing them as a caring professional healthcare provider; and 7. Expand students' understanding and appreciation of other cultures and environments.

Programme Intended Learning Outcomes	Upon completion of the Programme, students will be able to: 1. Apply critical, creative thinking and analytical skills in problem-solving and decision making and use of basic knowledge and skills in integrating research studies, evaluating and utilizing research findings in clinical laboratory practice. 2. Assess scientific methods and design of experiments to test hypotheses and thereby experience the process of laboratory investigations and technology discovery. 3. Contribute to the future of the population at large through commitment to life-long and life-wide learning and uphold the ethical, legal and professional standards of medical laboratory practice. 4. Acquire appropriate foundation knowledge in theory and practice of Medical Laboratory Science according to prescribed laboratory standards set by the Supplementary Medical Professions Council. 5. Develop the skills in analysis, presentation and interpretation of results of clinical laboratory data in relation to health / disease of individuals. 6. Demonstrate professionalism by working in accordance with good and safe clinical laboratory practice. 7. Demonstrate administrative skills consistent with philosophies of quality assurance, laboratory education, client relations and resource management. 8. Apply the fundamental tenets of medical science including, but not limited to, human biology, microbiology, medical physics, statistics taking into account the relationship between medicine, individual and society, including contemporary ethical and legal issues in animal and human research. 9. Demonstrate effective communication skills and be proficient in both Chinese and English, acquire a solid foundation in general education as well as good social, interpersonal skills and teamwork spirit. 10. Demonstrate social awareness and understanding of the community roles and value of non-profit
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	organizations in terms of their missions, culture and overall impact and significance in Hong Kong.
Education Pathways	Graduates of the Programme should be able to pursue further study in postgraduate programmes such as: • Master of Medical Science (Pathology or Microbiology), The University of Hong Kong • Master of Science in Medical Laboratory Science, The Chinese University of Hong Kong • Master of Science in Medical Laboratory Science, The Hong Kong Polytechnic University • PhD in local and overseas universities
Employment Pathways	Graduates will have ample opportunities to enter the workforce as: • Associate Medical Technologists (AMT) in public hospitals of Hospital Authority, Department of Health, Agriculture, Fisheries and Conservation Department, private hospitals and/or private laboratories • Technical experts in <i>in vitro</i> diagnostics industries • Graduate Research Assistants for clinical departments of local universities
Minimum Admission Requirements	<u>Year 1 entry (standard admission)</u> (a) Have obtained Level 3 in Chinese Language and English Language and Level 2 in Mathematics and Liberal Studies plus one Elective/Applied Learning Subject at Level 2 ("3322+2") in HKDSE; or (b) Have passes in AS Use of English and AS Chinese Language and Culture plus one AL subject/two AS subjects in HKALE and Level 2 for Chinese Language and English Language plus passes in three other subjects in HKCEE; or (c) Have obtained the International Baccalaureate (IB) Diploma with a minimum score of 24 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 (d) 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) 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); or (e) Have obtained equivalent qualifications. Note: Preference will be given to candidates who have obtained (i) Grade 3 or better in Higher Level Chemistry; and/or (ii) Level 4 or above for Chemistry or Combined Science with Chemistry in HKDSE; and/or (iii) Level 4 or above in English Language in HKDSE.
Operator	Tung Wah College 東華學院

