

ACCREDITATION REPORT

HONG KONG CHU HAI COLLEGE

LEARNING PROGRAMME ACCREDITATION

MASTER OF SCIENCE IN APPLIED ARTIFICIAL INTELLIGENCE PROGRAMME AND MASTER OF BUSINESS ADMINISTRATION PROGRAMME

JUNE 2023

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1. TERMS OF REFERENCE

- 1.1 Based on the Service Agreement (No.: AA877), 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 Hong Kong Chu Hai College 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 following programmes of Hong Kong Chu Hai College ('HKCHC', 'the College' or 'the Operator' hereafter) meet the stated objectives and QF standards and can be offered as accredited programmes.
 - Master of Science in Applied Artificial Intelligence Programme
 - Master of Business Administration Programme
 - (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

Learning Programme Accreditation

- 2.1 HKCAAVQ has determined that, subject to the fulfilment of the conditions set out below, the Master of Science in Applied Artificial Intelligence (MSAAI) and the Master of Business Administration (MBA) meet the stated objectives and QF standards at Level 6. Subject to the approval by the Chief Executive in Council, both programmes can be offered as accredited programmes with a validity period of three years.
- 2.2 In order for the validity period to take effect, HKCHC must be registered as a Post Secondary College under the Post Secondary Colleges Ordinance (Cap. 320) and it must comply with any restrictions stipulated in the Institutional Review (IR) Report. The authority for registration under Cap. 320 rests with the Permanent

Secretary for Education who may take account of the outcome of the IR Report and other considerations as deemed necessary.

2.3 Validity Period

- 2.3.1 The validity period will, provided the Operator fulfils all pre-conditions to the commencement of validity period as set out in paragraph 2.5.1, 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 MSAAI and MBA programmes are specified as follows:

Name of Operator	Hong Kong Chu Hai College 香港珠海學院		
Name of Award Granting Body	Hong Kong Chu Hai College 香港珠海學院		
Title of Learning Programme	Master of Science in Applied Artificial Intelligence Programme 應用人工智能理學碩士課 程	Master of Business Administration Programme 工商管理碩士課程	
Title of Qualification [Exit Award]	Master of Science in Applied Artificial Intelligence 應用人工智能理學碩士 Master of Business Administration 工商管理碩士		
Primary Area of Study and Training	A04 Computer Science and Information Technology A04 電腦科學及資訊科技	A03 Business and Management A03 商業及管理	
Sub-area (Primary Area of Study and Training)	A0401 Computer Science and Information Technology A0401 電腦科學及資訊科 技		
Other Area of Study and Training	Not applicable		

Sub-area (Other Area of Study and Training)	Not applicable		
QF Level	Level 6		
QF Credits	109 110		
Mode(s) of Delivery and Programme Length			
Start Date of Validity Period	1 September 2024 1 September 2024		
End Date of Validity Period	31 August 2027	31 August 2027	
Number of Enrolment(s)	Two enrolments per year		
Maximum Number of New Students	Full-time: 80 per year Part-time: 10 per year Part-time: 5 per year		
Address of Teaching / Training Venue(s)	80 Castle Peak Road, Castle Peak Bay, New Territories, Hong Kong 香港新界青山公路青山灣段 80 號		

2.5 **Conditions**

2.5.1 **Pre-conditions**

MSAAI and MBA

2.5.1.1 The College is to ensure appropriate alignment between the education pathways and curriculum by reviewing and revising the education pathways, or by any other appropriate revisions on different aspects of the programme such as the curriculum, programme positioning, intended learning outcomes, and supporting resources, in addition to any revisions on the education pathways. (para. 4.1.8)

MSAAI

2.5.1.2 The College is to review and modify the programme objectives to ensure appropriate alignment with the programme title, and programme intended learning outcomes. (para. 4.1.4)

- 2.5.1.3 The College is to review and revise the programme structure and content to ensure that
 - (i) the revised curriculum has an appropriate volume of learning at QF Level 6, and
 - (ii) students without related background in Mathematics and Programming can attain the programme intended learning outcomes. (para. 4.3.4)

The College is to submit relevant documents showing how the issues are addressed together with relevant approval records to HKCAAVQ for the fulfilment of the above pre-conditions on or before 30 November 2023.

2.6 Recommendations

HKCAAVQ offers the following recommendations for continuous improvement of the programmes:

MSAAI and MBA

- 2.6.1 It is <u>recommended</u> that the College should monitor the workloads of teaching staff to advise effective recruitment to ensure that there are sufficient teaching staff members dedicated to the Programme. (para. 4.5.4)
- 2.6.2 The Panel <u>recommended</u> that the College should consider a more active and proactive implementation of its policy describing the claimed approach to staff development that explicitly links research, scholarly activities, teaching and learning, professional practice, and industrial liaison. Staff development should be intended to ensure that these activities can systematically inform teaching practices, maintain the currency of the Programme, and provide staff with the possibility of academic advancement. (para. 4.5.5)

<u>MSAAI</u>

2.6.3 The Panel <u>recommended</u> that the academic results of students without prior education at an appropriate level of mathematics/programming knowledge should be monitored for detailed analysis of what support they would need and whether they have been well-equipped to effectively learn the subject matters in the area of AI. With reference to these findings, the admission

- mechanism should also be reviewed for this category of students in due course. (para. 4.2.5)
- 2.6.4 The College is <u>recommended</u> to incorporate ethical issues into the courses of the Programme. (para. 4.3.3)
- 2.6.5 The College is <u>recommended</u> to review and incorporate more updated learning resources into the course syllabi for each of the courses. To ensure the programme currency, this review should be undertaken and recorded every six months. (para. 4.4.2)

MBA

- 2.6.6 It is <u>recommended</u> that the College should regularly review the programme structure and curriculum, the depth of learning, and the total QF credits (i.e. the volume of learning) to ensure that the Programme continues to meet the intended learning outcomes and the changing needs of the industry. The review should be informed by regular collection of feedback from students, graduates and external parties, such as employers, and advisers. (para. 4.3.8)
- 2.7 HKCAAVQ will subsequently satisfy itself on 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 the fulfilment of any condition and compliance with any restriction stipulated in this Accreditation Report.

3. INTRODUCTION

3.1 The College has 12 HKCAAVQ-accredited master's degree programmes and 15 bachelor's degree programmes in various disciplines. The College has successfully obtained the Programme Area Accreditation (PAA) status for 9 programme areas at QF Level 5, namely (i) Chinese Language, (ii) Chinese Literature, (iii) Journalism, (iv) Mass Communication, (v) Accounting, (vi) Finance, (vii) General Business Administration, (viii) Civil Engineering, and (ix) Architecture. In 2020, the College has undergone the Periodic Institutional Review (PIR) at QF Level 5 for Chinese Language and

Chinese Literature, Journalism and Mass Communication, Accounting and Finance, General Business Administration, Civil Engineering, Construction Management, and Architecture.

- 3.2 HKCAAVQ formed an expert Panel for this accreditation exercise (Panel Membership at Appendix I). A site visit took place on 26-27 April 2023. HKCAAVQ and the College agreed to conduct the site visit by a combination of in-person interviews and video conferencing. The guiding document for the College and the Panel in conducting this exercise was HKCAAVQ's Manual for the Four-stage Quality Assurance Process under the Hong Kong Qualifications Framework (Version 1.2, November 2020).
- 3.3 In consideration of HKCHC's track record established from previous accreditation exercises and in accordance with HKCAAVQ's Differentiation Approach, information on the following aspects of the programme under review was not required:

Domain of Competence	Information Not Required		
LPA-6 Learning, Teaching and Enabling Resources/Services	Institute-wide student support services		

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 Objectives and Intended Learning Outcomes of the MSAAI programme are as follows:

Programme Objectives (POs) of the MSAAI programme

The Programme aims to nurture students to:

- PO1 Develop competence in the mastery, critical reasoning, analysis, evaluation and social impact analysis of artificial intelligence systems.
- PO2 Develop application knowledge and understanding in artificial intelligence system.
- PO3 Develop critical and problem-solving skills for complex and abstract professional problems, help meeting the needs of organizations and shareholders and to face challenges in the fast technology changing working environment.
- PO4 Develop advanced knowledge and skills in making systematic use of investigation to discover new knowledge and technologies in artificial intelligence.

<u>Programme Intended Learning Outcomes (PILOs) of the MSAAI</u> programme

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

- PILO1 Analyse and evaluate the artificial intelligence systems.
- PILO2 Appreciate the influence and impact; explain the core concepts, principles and theories of artificial intelligence system and the components.
- PILO3 Implement artificial intelligence systems to solve scientific, technological, and business problems and can contribute to professional leadership.
- PILO4 Pursue research or innovative applications in the field of artificial intelligence.
- 4.1.2 The Objectives and Intended Learning Outcomes of the MBA programme are as follows:

Programme Objectives (POs) of MBA programme

The Programme aims to nurture students to build up:

- PO1 mastery of various business and management disciplines so that they can evaluate and make strategic decisions in the fast changing business arena;
- PO2 adequate skills in critical reasoning, analysis, evaluation, and synthesis to form critical judgements based on the information and data gathered;
- PO3 capability to take on the role of business ethics and social responsibilities;
- PO4 abilities to take up mid-level managing posts.

<u>Programme Intended Learning Outcomes (PILOs) of MBA programme</u>

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

- PILO1 integrate knowledge and theories from various business disciplines to identify and develop business strategies and make effective management decisions;
- PILO2 gather, analyze and synthesize relevant information and data in order to solve business problems;
- PILO3 appreciate the importance of business ethics and social responsibility in managing business;
- PILO4 able to make decision individually or lead teamwork.

MSAAI and MBA

- 4.1.3 The College provided the Panel the following to demonstrate the two programmes' fulfilment of POs, PILOs and QF standards:
 - (a) Mapping of the College's mission against POs;
 - (b) Mapping of POs against PILOs;
 - (c) Mapping of PILOs against the Generic Level Descriptors (GLDs) at QF level 6;
 - (d) Mapping tables showing the alignment between the PILOs and the courses of the two new programmes; and

(e) Course syllabi of both programmes.

MSAAI

4.1.4 Accreditation documents stated that the MSAAI programme emphasises teaching academic knowledge and practical application of artificial intelligence (AI) technology. Considering the programme title, PILOs, and the programme structure and content, the Panel agreed with the applied positioning of the Programme. However, the Panel expressed the concern that the POs do not align with the applied positioning of the Programme sufficiently. The Panel formed the view that a clear alignment is lacking in the Programme between the POs, PILOs, the curriculum and the programme title. The Panel has therefore stipulated the following pre-condition for the MSAAI programme:

<u>Pre-condition (for the MSAAI programme)</u>

The College is to review and modify the programme objectives to ensure appropriate alignment with the programme title, and programme intended learning outcomes.

The College is to submit relevant documents showing how the issue is addressed together with relevant approval records to HKCAAVQ for the fulfilment of the above pre-condition on or before 30 November 2023.

4.1.5 The Panel of MSAAI noted the market surveys in ascertaining the demand for graduates conducted by the Polling and Public Opinion Centre (PPOC) of the College. PPOC surveyed internship hosts and information technology (IT) related corporations, and the graduates and current students at the College, and graduates of other local universities. The majority of students who have taken the College's survey agreed that a master's level qualification in AI would be beneficial for their career advancement. In the analysis, references were made to recent publications and statistics obtained from the internet on the rapid growth in the innovation and technology industry in Greater Bay Area (GBA) to demonstrate the considerable job opportunities in the industry in the future. Overall, the College's analysis reflected a growing manpower demand for AI and data science professionals in the GBA.

MBA

4.1.6 The Panel pointed out that there was only one elective course on business ethics and social responsibility in the curriculum design of the MBA programme. The Panel was concerned about how the

various core courses contribute to PO3, i.e. the capability to take on the role of business ethics and social responsibilities. In the *Response to Panel's Initial Comments*, the College provided to the Panel the revised course syllabi showing that elements of ethics and social responsibilities have been incorporated into five core courses of the Programme. Having reviewed the accreditation documents and discussion with members of the programme team of MBA during the site visit, the Panel considered that the POs and PILOs for the MBA programme are aligned and the programme is pitched at QF Level 6.

4.1.7 The Panel of MBA noted the market analysis conducted by PPOC of the College in ascertaining the demand for MBA graduates. PPOC surveyed internship hosts and graduate employers, and current students and the graduates of the College. Analysis of the findings showed that over 90% of the prospective students who have taken the College's survey agreed that a qualification in MBA would be beneficial for their academic and career development. In addition, most of the respondents of the employer survey preferred recruiting MBA graduates. Based on findings from desktop researches, the College considered that there should be demand for the proposed MBA programme in the GBA.

MSAAI and MBA

As for education and employment pathways of graduates of the 4.1.8 MSAAI and MBA programmes, the College provided relevant information in the Graduate Profiles (Appendices II and III). When the Panel reviewed the PILOs and curricula in the accreditation documents, they noted some gaps between the applied positioning of both programmes and what was stated as the education pathways. The MSAAI programme aims to enable students to enhance their understanding in the advanced applications of AI and therefore the graduates could develop careers as an AI software engineer, machine learning engineer, data analyst and Al project manager. The College also stated that the career-oriented approach in the design of the MBA programme would be beneficial to students for their future employment. In the Response to Panel's Initial Comments, the programme team of MBA explained that preparing graduates for further studies in research-based programmes is only one of the minor aims. However, the Panel noted the education pathways of both programmes took that the graduates of these two programmes can pursue further study in research-based programmes, such as MPhil or PhD, offered by local and overseas universities. During the site visit, the Panel further gueried how students would be equipped with the necessary knowledge and skills for further studies in research-based programmes. The programme team of MSAAI stated that students would acquire skills by conducting the Capstone Project. The programme team of MBA explained that the academic advisor would advise the student to

choose the elective course, namely *Research Methods for Management*, if he/she is interested in developing research skills. After further reviewing the positioning, PILOs and the programme structure and curriculum of both programmes, the Panel considered that the stated education pathways of both MSAAI and MBA do not align with the curricula and might give a false hope to prospective students or graduates. In light of the above, the Panel has therefore stipulated the following pre-condition for the MSAAI and MBA programmes:

Pre-condition (for the MSAAI and MBA programmes)

The College is to ensure appropriate alignment between the education pathways and curriculum by reviewing and revising the education pathways, or by any other appropriate revisions on different aspects of the programme such as the curriculum, programme positioning, intended learning outcomes, and supporting resources, in addition to any revisions on the education pathways.

The College is to submit relevant documents showing how the issue is addressed together with relevant approval records to HKCAAVQ for the fulfilment of the above pre-condition on or before 30 November 2023.

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.

MSAAI

4.2.1 The minimum admission requirements are as follows:

An applicant seeking admission to this programme shall possess:

- A bachelor's degree in science, engineering, business, finance, cross-media or related disciplines.
- A bachelor's degree in other disciplines who studied university level linear algebra, calculus, probability theory, statistics and computer programming will also be considered; or
- Equivalent; and

<u>Proficiency/knowledge of the Chinese language at one of the following levels:</u>

- Level 3 in Chinese Language of HKDSE;
- Level 5 at Hanyu Shuiping Kaoshi (HSK) (漢語水平考試第五級);
- Level 2-B at Putonghua Shuiping Ceshi (PSC), State Language Affairs Commission (國家語言 文字工作委員會普通話水平測試 二級乙等);
- Bachelor's degree from a university or institution in which the medium of instruction and/or examination is Chinese; or
- Equivalent; and

<u>Proficiency/knowledge of the English language at one of the following levels:</u>

- A score of 425 at Level 4 of the College English Test (CET);
- Bachelor's degree from a university or institution in which the medium of instruction and/or examination is English; or
- Equivalent

MBA

4.2.2 The minimum admission requirements are as follows:

An applicant who wishes to be admitted to this Programme shall hold:

- A bachelor's degree or equivalent qualification;
- At least two years of working experience: and
- Level 3 or above in Chinese Language of HKDSE; or other evidence that the applicant has sufficient knowledge of the Chinese Language.

MSAAI and MBA

- 4.2.3 The Panel enquired about the types of qualifications that are considered "equivalent qualification" to "a bachelor's degree" as stipulated in the general requirements for both programmes. In the *Response to Panel's Initial Comments*, the College provided examples of "a lower qualification but has rich work experiences" and "four-year studies in post-secondary level". The Panel explained relevant work experience could not be considered as equivalent qualification and also these examples given were not equivalent to a bachelor's degree. The College confirmed the understanding that these examples are non-standard admission.
- 4.2.4 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 their qualifications, 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.

<u>MSAAI</u>

- 4.2.5 Given the technological nature of the Programme, the Panel was concerned about how to ensure bachelor's degree holders in business, finance and cross media would have the necessary skills to study the core courses, namely Mathematics for AI and Programming for AI. In response to the Panel's enquiry, the College stated that the two mentioned courses could provide the mathematics and programming foundational knowledge for this applied master programme. These courses could be regarded as bridging courses for students without engineering or science background. The Panel further queried how to assess whether bachelor's degree holders in other disciplines could meet the requirements linear algebra. admission on calculus. programming skills. The College informed the Panel that the Master Programme Recruitment Committee in the Department of Computer Science (CS) would review the academic records of applicants. While the Panel considered that the student selection process for the Programme is generally appropriate, the Panel **recommended** that the academic results of students without prior education at an appropriate level of mathematics/programming knowledge should be monitored for detailed analysis of what support they would need and whether they have been well-equipped to effectively learn the subject matters in the area of AI. With reference to these findings, the admission mechanism should also be reviewed for this category of students in due course.
- 4.2.6 The Panel enquired whether a Level 3 in the Chinese Language of HKDSE would be a sufficient language level to handle Putonghua lectures and other teaching and learning activities. In the *Response to Panel's Initial Comments*, the Panel was advised that a Putonghua interview and a Putonghua test would be conducted to assess whether local applicants have the ability to master Putonghua.
- 4.2.7 The College proposed the maximum number of new students of the MSAAI programme to be 90 per year of study, of which 80 are full-time (FT) and 10 are part-time (PT). The College indicated that this number had been taken into consideration the expected popularity of the programme as well as its resources in terms of staffing and facilities.

4.2.8 After reviewing the above information and with the recommendation made, the Panel considered that the minimum admission requirements and the student selection processes are generally appropriate.

MBA

- 4.2.9 The Panel was unclear about the corresponding Chinese language requirement for Mainland students. During the site visit, the Panel sought clarifications from the programme team on whether the applicants need to fulfil the Chinese language proficiency requirement if the Mainland applicant's bachelor's degree was not obtained from a university/tertiary institution where Chinese is the medium of instruction. The College shared with the Panel that these applicants need to fulfil the Chinese language proficiency requirement. Also, Putonghua interviews will be conducted to assess whether applicants have the ability to master Putonghua.
- 4.2.10 The College plans to admit a yearly maximum of 75 FT and 5 PT new students to the MBA programme. The College indicated that this proposed number is based on the expected popularity of the programme as well as its resources in terms of staffing and facilities.
- 4.2.11 Based on the information provided and the discussions with the programme team, the Panel considered that the admission requirements stipulated for the MBA programme are in general appropriate to ensure that students admitted will have the requisite knowledge and skills to undertake the Programme.

4.3 **Programme Structure and Content**

The structure and content of the learning programme must be upto-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.

<u>MSAAI</u>

- 4.3.1 The College provided the Panel with the following documents:
 - (a) The curriculum of the MSAAI programme, showing Programme Core, Elective, and the number of credits of each course; and

- (b) Course syllabi showing the Course Intended Learning Outcomes (CILOs), topics, teaching activities, assessment tasks, distribution of notional learning hours, credits, and references.
- 4.3.2 The MSAAI programme is made up of different components: 18 credits of Core courses, and 9 credits of Elective courses. Students are required to complete a total of 27 credits (109 QF credits) for graduation. The ratio of contact hours to self-study hours is 1:2 for various teaching and learning activities. The table below shows the distribution of credits constituting the Programme.

Core Courses			
Course Title	Credits		
Mathematics for Artificial Intelligence	3		
Programming for Artificial Intelligence	3		
Artificial Intelligence	3		
Machine Learning	3		
Capstone Project	6		
Elective courses (Any three)			
Course Title	Credits		
Big Data Analytics	3		
	J		
Data Mining & Data Warehouse	3		
Data Mining & Data Warehouse Artificial Intelligence Theories and Application for Creative Industries			
Artificial Intelligence Theories and Application for	3		
Artificial Intelligence Theories and Application for Creative Industries	3		
Artificial Intelligence Theories and Application for Creative Industries Business Model Innovation through Big Data	3 3 3		
Artificial Intelligence Theories and Application for Creative Industries Business Model Innovation through Big Data Computer Vision	3 3 3 3		

- 4.3.3 The Panel reviewed the programme content of the MSAAI programme and observed that professional ethics has not been covered sufficiently in the Programme. In *Response to Panel's Initial Comments*, the College explained that concepts of ethical and legal issues related to AI applications will be covered by the expert seminar series and *Capstone Project*. The Panel had the view that professional ethics should be an important element in the curriculum of the MSAAI programme. The College is therefore <u>recommended</u> to incorporate ethical issues into the courses of the Programme.
- 4.3.4 The Panel reviewed the syllabi of two core courses, namely *Mathematics for AI* and *Programming for AI*, and considered them fundamental but too basic for the stated QF level 6. After reviewing

the sample teaching materials, sample examination papers and the associated assessment rubrics of these two courses, the Panel pointed out that graduates of undergraduate programmes in computer science or engineering could have taken similar courses in their undergraduate studies. During the site visit, the Panel was informed that students without mathematics and programming knowledge would learn basic skills in these two courses, which could be offered as non-credit bearing bridging courses before the commencement of the Programme. The Panel of MSAAI considered that these two courses are introductory in nature and not of the required depth for a master degree in AI. Based on the above information, The Panel therefore set the following pre-condition:

Pre-condition (for the MSAAI programme)

The College is to review and revise the programme structure and content to ensure that

- (i) the revised curriculum has an appropriate volume of learning at QF Level 6, and
- (ii) students without related background in Mathematics and Programming can attain the programme intended learning outcomes.

The College is to submit relevant documents showing how the issues are addressed together with relevant approval records to HKCAAVQ for the fulfilment of the above pre-condition on or before 30 November 2023.

MBA

- 4.3.5 The College provided the Panel with the following documents:
 - (a) The curriculum of the MBA programme, showing Core courses, Elective courses, and the number of credits of each course; and
 - (b) Course description forms showing the course aims, CILOs, topics, teaching and learning activities, assessment tasks, credits, and references.
- 4.3.6 The MBA programme is made up of different components: 16 credits of Core courses, and 9 credits of Elective courses. Students are required to complete a total of 25 credits (110 QF credits) for graduation. The table below shows the distribution of credits constituting the Programme.

Core Courses	
Course Title	Credits
Managerial Economics	3
Accounting for Managers	3
Financial Management	3
Marketing Management	3
Strategic Management	3
Professional Seminar Series	1
Elective courses (Any three)	
Course Title	Credits
Global Trade and Finance	3
Global Business	3
Application of Computing Technology in Business	3
Digital Marketing	3
Research Methods for Management	3
Marketing Competitive Analysis	3
Security Analysis and Valuation	3
Current Issues in Business Ethics and Social Responsibility	3
Classical Confucianism and Ethics	3
Buddhism and Management	3

- 4.3.7 The Panel noted that the MBA programme will adopt the model of "management theories + management simulations + management practices" to develop management skills. In *Response to Panel's Initial Comments*, the College provided examples to demonstrate how the Programme makes use of real business cases, management simulations and management practices to deliver teaching and learning activities. The Panel was advised that students can choose any three elective courses from four areas, including Global Management, Application of Technology, Business Competitiveness, and Chinese Culture.
- 4.3.8 The Panel noted the total QF credits of the MBA programme seem to be on the low side when compared with similar programmes offered in Hong Kong. During the site visit, the College explained the total volume of learning of this Programme has considered feedback provided by students from another master programme offered by the Faculty of Business, and is so designed to avoid bringing students stressful and heavy workload. Given the pace of change and developments in the industry, the Panel identified the need to continue to maintain the currency of the industry, and to ensure the sustainability of the Programme and the relevance of the teaching through continuous input from the industry. It is **recommended** that

the College should regularly review the programme structure and curriculum, the depth of learning, and the total QF credits (i.e. the volume of learning) to ensure that the Programme continues to meet the intended learning outcomes and the changing needs of the industry. The review should be informed by regular collection of feedback from students, graduates and external parties, such as employers, and advisers.

4.3.9 Notwithstanding the recommendation, the Panel considered that the content and structure of the MBA Programme are current and integrated to ensure students are able to achieve the stated learning outcomes and meet the programme aims.

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.

MSAAI

4.4.1 The medium of instruction for the MSAAI programme is Chinese. Lectures will be delivered in Putonghua. English will be used as a supplement to the Programme. In the Response to Panel's Initial Comments, the College confirmed that written assessments will be conducted in mainly simplified Chinese, but traditional Chinese is acceptable. Oral presentation will be conducted in Putonghua. The Programme is delivered through lectures, in-class practice, group discussions, laboratories, tutorials, and expert seminars. The Panel noted the College supports the use of ChatGPT in the classroom. The Panel was informed that one expert seminar will be included in each of the two core courses, namely Artificial Intelligence and Machine Learning, and students will have to submit seminar reports for assessment after attending the expert seminars. The Panel was advised that the Capstone Project will be offered as an individual project. The table below shows the maximum number of students in various modes of teaching.

Modes of teaching	Maximum number of students
Lecture	80
Tutorial	45
Project supervision	6

- 4.4.2 The College shared with the Panel the course syllabi and sample teaching materials. The Panel found the proposed textbooks for several courses are often dated. The College is <u>recommended</u> to review and incorporate more updated learning resources into the course syllabi for each of the courses. To ensure the programme currency, this review should be undertaken and recorded every six months.
- 4.4.3 The MSAAI programme uses a variety of methods to assess students' performance. These methods include examination, quiz, assignment, project, presentation, and individual report. To illustrate the standards of the Programme, the College provided the following information to the Panel:
 - (a) Assessment methods adopted in each course and their relative weighting; and
 - (b) Sample examination papers and the associated assessment rubrics of the Programme.
- 4.4.4 The graduation requirements for the MSAAI programme are to achieve a minimum of 27 credits, comprising 12 credits in core courses, 6 credits in capstone project, and 9 credits in elective courses, and a Graduation Grade Point Average (GPA) of 2.0 within the maximum period of study (2 years for FT students and 4 years for PT students). The award classification:

Award classification	Minimum graduation GPA		
Distinction	3.5		
Merit	3.0		
Pass	2.0		

4.4.5 After considering the above information and notwithstanding the recommendation, the Panel formed the view that the MSAAI programme had demonstrated its effectiveness in delivering the programme content and assessing the attainment of the PILOs.

MBA

4.4.6 For the MBA programme, the medium of instruction is Chinese as well. Lectures will be delivered in Putonghua. In the *Response to Panel's Initial Comments*, the College confirmed that written assessments will be conducted in simplified Chinese and oral presentation will be conducted in Putonghua. The Programme is

delivered through lectures, in-class discussion, workshop, tutorials, and seminars. Regarding the core course namely, *Professional Seminar Series*, the Panel found that at least five talks will be organised for this two-term course. The College stated that the use of ChatGPT in the classroom is supported as it facilitates the development of essential skills such as critical thinking and problem-solving by interacting with AI. The table below shows the maximum number of students in various modes of teaching.

Modes of teaching	Maximum number of students		
Lecture	80		
Project supervision	8		

- 4.4.7 To illustrate the standards of the MBA programme, the College shared with the Panel the course syllabi, assessment methods adopted in each course and their relative weighting, and sample examination papers and the associated assessment rubrics. The Programme uses a variety of assessment formats to assess students' performance. These methods include examination, quiz, assignment, case study report, presentation, and individual/group report.
- 4.4.8 The graduation requirements for the MBA programme are to achieve a minimum of 25 credits, comprising 16 credits in core courses, and 9 credits in elective courses, and a Graduation GPA of 2.0 within the maximum period of study (2 years for FT students and 4 years for PT students). The award classification:

Award classification	Minimum graduation GPA		
Distinction	3.5		
Merit	3.0		
Pass	2.0		

4.4.9 Based on the information provided on learning, teaching and assessment activities designed for the MBA programme, the Panel confirmed that the College had demonstrated its effectiveness in delivering the programme content and assessing the attainment of the PILOs.

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.

MSAAI

- 4.5.1 The Programme is jointly offered by the CS Department and Department of Journalism and Communication. The Programme Director is an Associate Professor in CS Department and also one of the academic staff of the Programme. The College provided to the Panel the following documents:
 - (a) the mapping of courses and teaching staff for the Programme;
 - (b) the curriculum vitae of the head of CS Department, Programme Director and teaching staff of the Programme; and
 - (c) the projected manpower plan from 2024/25 to 2026/27.

		Projected Staff Numbers			
Post by Ranks	Existing Strength	2024/25	2025/26	2026/27	
Professor	2	2	2	2	
Associate Professor	2	2	2	2	
Assistant Professor	0	1	2	2	
Senior Lecturer	1	1	1	1	
Lecturer	2	2	2	3	

4.5.2 With respect to staffing, the Panel noted that the planned student-teacher ratio (STR) for the Programme is 10 to 1. In the *Response to Panel's Initial Comments*, the College stated that two new FT Assistant Professors, one of whom will be recruited in 2024/25 and another one in 2025/26, and one new PT lecturer will be recruited in 2026-27. These three new teaching staff with specialisations in relevant areas of AI will be employed to manage the teaching load in the longer term. Regarding the staffing of MSAAI programme, the College shared with the Panel details about their experiences in AI.

MBA

- 4.5.3 The MBA programme is hosted by the Faculty of Business. The Programme Director is the Head of Department of Business Administration and an Associate Professor in the Department and also one of the academic staff of the Programme. The College provided to the Panel the following documents:
 - (a) the mapping of courses and teaching staff for the Programme;
 - (b) the curriculum vitae of the Dean of Faculty of Business, Programme Director and teaching staff of the MBA; and
 - (c) the projected manpower plan from 2024/25 to 2026/27.

Post by Panks		Projected Staff Numbers (FT equivalent)		
Post by Ranks	Existing Strength	2024/25	2025/26	2026/27
Professor	2.5	4.5	4.5	5
Associate Professor	5	6	6	7
Assistant Professor	4	5	5	7
Senior Lecturer	0	1	1	1
Lecturer	1	1	1	1

MSAAI and MBA

4.5.4 During the site visit, the Panel met with the teaching staff to discuss their workload. A representative of MSAAI programme mentioned that the teaching load for FT teaching staff is four courses per semester, plus teaching-related administrative work. load could be reduced by one course for an academic staff member with heavy administrative load. The Panel noted that the annual maximum number of new students of MSAAI is 80 FT and 10 PT. As Capstone Project would be offered as individual projects for students, the workload of teaching staff would be higher when the new programme is launched. The teaching staff shared the same view with the Panel. On the other hand, a representative of MBA programme mentioned that the experienced teaching staff need to take up new courses and prepare teaching materials for the new master programme. Considering the above information, it is recommended that the College should monitor the workloads of teaching staff to advise effective recruitment to ensure that there are sufficient teaching staff members dedicated to the two new programmes.

- 4.5.5 The Panel noted that the College provided support for staff development. For example, funding has been allocated for teaching staff to attend conferences, and overseas study tours to keep their knowledge current. Academic staff are also provided with funding for conducting researches, such as seed funding, startup funds and conference grants. Noting, however, the heavy workloads of teaching staff, the Panel recommended that the consider a more active should and implementation of its policy describing the claimed approach to staff development that explicitly links research, scholarly activities, teaching and learning, professional practice, and industrial liaison. Staff development should be intended to ensure that these activities can systematically inform teaching practices, maintain the currency of the Programme, and provide staff with the possibility of academic advancement.
- 4.5.6 Given the information provided in the documentation and discussions during the site visit, the Panel formed the view that, notwithstanding the above recommendations, the College would have teaching staff with the necessary competence, qualifications and experience to deliver the MSAAI and MBA programmes. There are also appropriate staff development schemes and activities in place to ensure that staff are kept updated for the quality delivery of the two 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.

MSAAI

4.6.1 On financial resources for the Programme, the Panel was provided with a projection of the income and expenditure for the initial five years of operation of the Programme. The Panel Chair reviewed the budget for staffing, staff development, new equipment, computer software, and laboratory support for the Programme. The College shared with the Panel that the breakeven student number of the Programme is 30. In the case of under-enrolment of the Programme, the CS department will apply for external funding to enhance the teaching and learning facilities of the Programme.

4.6.2 Regarding the new equipment to support the MSAAI programme, the Panel was informed that two servers for Al training and 30 workstations would be set up. The Panel reviewed the lists of new software to support the teaching and learning activities of the Programme. The Panel was advised that the Google Cloud Machine Learning Engine will be used for the Capstone Project. During the site visit, the Panel toured the AR/VR Lab and a computer room, and was given demonstrations of how the various software would be used to support the teaching and learning activities of the Programme. To ensure that teaching quality is continuously improved, and staff should be supported to maintain their 'subject currency' to ensure the quality and delivery of the Programme, the Panel advised that the College to ensure that it would strengthen the relationships with relevant industries, professional associations and conference networks to ensure that academics and students can gain access to relevant and current developments.

MBA

- 4.6.3 The College provided financial projections for the initial five years of operation (2024/25 to 2028/29) of the Programme to the Panel Chair. In the Response to Panel's Initial Comments, the Panel was informed the breakeven student number of the Programme is 20. During the site visit, the College further explained to the Panel that master programmes of the Faculty of Business should be competitive in student recruitment. Even in the case of underenrolment of the Programme, the College is committed to operating the MBA programme until the end of validity period. As such, the Panel was of the view that the College has adequate financial resources to support the operation of the Programme.
- 4.6.4 On physical resources, the Panel had a tour of the main campus where teaching and learning activities are conducted. The tour included the library and computer room. The Panel considered the College had provided sufficient resources for the learning and teaching activities for the Programme.

MSAAI and MBA

4.6.5 The lists of current and planned library acquisitions and e-resources relevant to the two programmes have been provided by the College. The Panel acknowledged HKCHC's investment in the two new programmes.

- 4.6.6 The Panel noted there are a range of support services provided by the College to the students. (a) Academic advisors from the teaching team to provide each student with academic guidance and advice. (b) Student development and counselling services are provided by the Student Affairs Office. (c) Language enhancement support is provided by the English Language and Culture Centre.
- 4.6.7 Considering the above information, and notwithstanding the advice, the Panel considered that the College provided appropriate and sufficient resources for the learning and teaching activities for the MSAAI and MBA programmes.

4.7 Programme Approval, Review and Quality Assurance

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

MSAAI and MBA

- 4.7.1 The Panel noted that the College adopts internal and external quality assurance (QA) processes to monitor learning programmes to ensure the learning outcomes are achieved. The QA Manual set out the approval processes and procedures at each stage of programme development and review. The Panel reviewed a range of documents, including the extracts of records of the minutes of Academic Board, Programme Committee, Quality Committee, Faculty Board and Departmental meetings outlining the discussions, decisions and approvals in relation to the two new programmes and demonstrating the implementation of the QA system specific to these programmes. The Panel observed that these boards/committees had provided various inputs for the development of the proposed programmes. For instance, comments provided by the Education Bureau, HKSAR on the new programme proposal of MSAAI had been followed up by the CS Department.
- 4.7.2 Regarding the internal QA system, the hosting Faculty is responsible for managing its programmes and closely monitoring its standard. The Programme Management Committee of the Programme is responsible for reporting on the progress and status of the programme to the Faculty Board at the end of an academic year. All

decisions contributing to the overall quality of the Programme will be reviewed at the Academic Board.

- 4.7.3 Prior to seeking HKCAAVQ's accreditation, the CS Department has invited an External Examiner and Programme Advisors to review the MSAAI programme proposal. The Panel noted the departmental responses to comments provided by these external stakeholders. As for the Faculty of Business, it has invited various external stakeholders, including Advisory Committee, external academics, and alumni to provide comments on the MBA programme proposal. The comments received are related to the programme structure and course content of the two new programmes.
- 4.7.4 The Panel concluded that the College has clear and comprehensive QA processes. These support the delivery, continuous development and monitoring of the two programmes to ensure that the learning outcomes, learning and teaching activities and learner assessments are effective in meeting the programme aims.

5. IMPORTANT INFORMATION REGARDING THIS ACCREDITATION REPORT

5.1 Variation and withdrawal of this Accreditation Report

- 5.1.1 This Accreditation Report is issued pursuant to section 5 of the AAVQO, and contains HKCAAVQ's substantive determination regarding the accreditation, including the validity period as well as any conditions and restrictions subject to which the determination is to have effect.
- 5.1.2 HKCAAVQ may subsequently decide to vary or withdraw this Accreditation Report if it is satisfied that any of the grounds set out in section 5 (2) of the AAVQO apply. This includes where HKCAAVQ is satisfied that the Operator is no longer competent to achieve the relevant objectives and/or the Programme no longer meets the standard to achieve the relevant objectives as claimed by the Operator (whether by reference to the Operator's failure to fulfil any conditions and/or comply with any restrictions stipulated in this Accreditation Report or otherwise) or where at any time during the validity period there has/have been substantial change(s) introduced by the Operator after HKCAAVQ has issued the accreditation report(s) to the Operator and which has/have not been approved by HKCAAVQ. Please refer to the 'Guidance Notes on Substantial

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

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

5.2 **Appeals**

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

5.3 Qualifications Register

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

graduated with the named qualification listed in the QR will be considered to have acquired a qualification recognised under the QF.

Ref: 55/33/01 26 June 2023 JoH/AnC/FiL/fil/amc

Appendix I

Chu Hai College of Higher Education

Learning Programme Accreditation for Master of Science in Applied Artificial Intelligence Programme and Master of Business Administration Programme

26 - 28 April 2023

Panel Membership

Panel Chair

Professor SUN Jianrong

Vice President and Professor Eurasia University

CHINA

* Panel Secretary

Dr. Fiona LOCK

Consultant

Academic Accreditation and Assessment Hong Kong Council for Accreditation of Academic and Vocational Qualifications HONG KONG

Panel Members

<u>Discipline – Applied Artificial Intelligence</u>

Dr CHAN Kim Chung

Founder

DataFarm Co. Ltd. HONG KONG

Professor CHIN Yuk Lun Francis

Emeritus Professor

Department of Computer Science The University of Hong Kong

HONG KONG

Professor Frans Alexander HENSKENS

Conjoint Professor
School of Medicine and Public Health/
Computer Science and Software
Engineering
The University of Newcastle
AUSTRALIA

<u>Discipline – Business Administration</u>

Professor MO Lai Lan

Professor
Department of Accountancy
City University of Hong Kong

HONG KONG

Professor NG Cheuk Yin Andrew

Assistant Dean

CUHK Business School

The Chinese University of Hong Kong

HONG KONG

Professor Tony VAN ZIJL

Emeritus Professor Accounting and Financial Management Victoria University of Wellington NEW ZEALAND

^{*} The Panel Secretary is also a member of the Accreditation Panel

Appendix II

Graduate Profile of Master of Science in Applied Artificial Intelligence Programme

Qualification Title	Master of Science in Applied Artificial Intelligence
	應用人工智能理學碩士
Qualification Type	Master Degree
QF Level	Level 6
Primary Area of Study and Training	Computer Science and Information Technology
Sub-area (Primary Area of Study and Training)	Computer Science and Information Technology
Programme Objectives	The programme aims to nurture students to:
	PO1 Develop competence in the mastery, critical reasoning, analysis, evaluation and social impact analysis of artificial intelligence systems.
	PO2 Develop application knowledge and understanding in artificial intelligence system.
	PO3 Develop critical and problem-solving skills for complex and abstract professional problems, help meeting the needs of organizations and shareholders and to face challenges in the fast technology changing working environment.
	PO4 Develop advanced knowledge and skills in making systematic use of investigation to discover new knowledge and technologies in artificial intelligence.
Programme Intended Learning Outcomes	Upon completion of the programme, students should be able to:
	PILO1 Analyse and evaluate the artificial intelligence systems.
	PILO2 Appreciate the influence and impact; explain the core concepts, principles and theories of artificial intelligence system

	and the components.
	and the components.
	PILO3 Implement artificial intelligence systems to solve scientific, technological, and business problems and can contribute to professional leadership.
	PILO4 Pursue research or innovative applications in the field of artificial intelligence.
Education Pathways	Graduates of this Programme can pursue further study in other areas via enrolment in research-based programmes (e.g. MPhil or PhD) offered by local and overseas universities.
Employment Pathways	Al Software Engineer Al Programmer Business Intelligence Developer Machine Learning Engineer Data Analysts/Scientist Data warehouse engineer Research in artificial intelligence Al Project Manager Al System Analysts
Minimum Admission Requirements	 An applicant seeking admission to this programme shall possess: A bachelor's degree in science, engineering, business, finance, cross-media or related disciplines. A bachelor's degree in other disciplines who studied university level linear algebra, calculus, probability theory, statistics and computer programming will also be considered; or Equivalent; and
	Proficiency/knowledge of the Chinese language at one of the following levels: Level 3 in Chinese Language of HKDSE; Level 5 at Hanyu Shuiping Kaoshi (HSK) (漢語水平考試第五級); Level 2-B at Putonghua Shuiping Ceshi (PSC), State Language Affairs Commission (國家語言文字工作委員會普通話水平測試二級乙等); Bachelor's degree from a university or institution in which the medium of instruction and/or

	examination is Chinese; or • Equivalent; and
	 Proficiency/knowledge of the English language at one of the following levels: A score of 425 at Level 4 of the College English Test (CET); Bachelor's degree from a university or institution in which the medium of instruction and/or examination is English; or Equivalent
Operator	Hong Kong Chu Hai College

Appendix III

Graduate Profile of Master of Business Administration Programme

Qualification Title	Master of Business Administration
	工商管理碩士
Qualification Type	Master Degree
0511	110
QF Level	Level 6
Primary Area of Study and	Business and Management
Training	Business and Management
9	
Sub-area (Primary Area of	General Business Management
Study and Training)	3.00
-	
Programme Objectives	The programme aims to nurture students to build up:
	PO1 mastery of various business and management disciplines so that they can evaluate and make strategic decisions in the fast changing business arena;
	PO2 adequate skills in critical reasoning, analysis, evaluation, and synthesis to form critical judgements based on the information and data gathered;
	PO3 capability to take on the role of business ethics and social responsibilities;
	PO4 abilities to take up mid-level managing posts.
Programme Intended Learning Outcomes	Upon completion of the Programme, students should be able to:
	PILO1 integrate knowledge and theories from various business disciplines to identify and develop business strategies and make effective management decisions;
	PILO2 gather, analyze and synthesize relevant information and data in order to solve business problems;
	PILO3 appreciate the importance of business

Education Pathways	ethics and social responsibility in managing business; PILO4 able to make decision individually or lead teamwork. Graduates of this Programme can pursue further study via enrolment in research-based programmes (e.g. MPhil or PhD) offered by local and overseas universities.
Employment Pathways	A graduate of this programme may work in a position, but not limited to, as below: Marketing Manager Management Consultant Business Analyst Administrative Manager Human Resource Manager Operations Manager
Minimum Admission Requirements	An applicant who wishes to be admitted to this Programme shall hold: (i) A bachelor's degree or equivalent qualification; (ii) At least two years of working experience: and (iii) Level 3 or above in Chinese Language of HKDSE; or other evidence that the applicant has sufficient knowledge of the Chinese Language
Operator	Hong Kong Chu Hai College

HKCAAVQ Report No.: 23/84