1. EXECUTIVE SUMMARY

- 1.1 For the purpose of the Pilot Study on the Program Accreditation Guidelines developed by the Tertiary Education Services Office (GAES) of the Government of Macao SAR for the proposed Higher Education Evaluation Framework of Macao, the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) was commissioned by the Macau University of Science and Technology to provide the following consultancy service in the capacity of the external quality assurance agency (EQAA):
 - (a) To conduct program accreditation of the University's *Bachelor of Applied Economics* program, as a test case of the Pilot Study, against the accreditation criteria and standards set out in the *Guidelines on New Program Accreditation*;
 - (b) To provide the *Pilot Study Accreditation Report* according to the specifications in the Guidelines specified in (a) above; and
 - (c) To provide, where applicable, post-accreditation service covering: (i) evaluation of whether the University has fulfilled the specified condition(s), if any; and (ii) issuing a written Confirmation of Fulfillment of Condition(s) to the University.
- 1.2 The Macau University of Science and Technology (the University) was founded in 2000 and is authorized by the Government of Macao SAR to award academic degrees at doctoral, master and bachelor levels. The Bachelor of Applied Economics program (the Program) is hosted by the School of Business (MSB), which, to date, has two doctoral, five master's and one bachelor degree programs on offer. The University is planning to launch the Program in September 2016.
- 1.3 The scope of accreditation (評審條款) agreed between the University and HKCAAVQ and approved by GAES is set out in **Annex 1**. An expert panel was formed (Panel Membership at **Annex 2**) for the accreditation exercise. A site visit was made to the University on 1 and 2 December 2015. The *Guidelines on New Program Accreditation (NPAG1.0)* and the *Guidelines for External Quality Assurance Agencies (EQAAG1.0)* were the guiding documents for the University and the Panel in conducting this exercise and in preparing this report.

1.4 Accreditation outcome and decisions

1.4.1 Having considered the Panel's recommended accreditation outcome and decisions, as well as associated evidence and considerations documented in the final draft accreditation report, the Government of Macao SAR accepted the following accreditation outcome and decisions:

Acc	reditation outcome:
	Approval
\checkmark	Conditional approval
	Non-approval

The accreditation decisions are as follows:

Condition (para. 2.8.6)	The University is to review the program structure to provide a clearer pedagogical classification of the Program Foundation, Program Core and Program Elective courses, and to enhance flexibility in the choice of Program Electives. The University is required to submit a revised Study Plan of the Program by 30 September 2016.
Program Title	Bachelor of Applied Economics 應用經濟學學士學位課程
Qualification Title	Bachelor of Applied Economics 應用經濟學學士
Major / Stream	Not Applicable
Maximum number of enrolment and classes	150 (3 classes) per year
Mode of Delivery	Full-time

1.5 **Commendation**

1.5.1 The University was commended for its proactive engagement in this pilot exercise, which will provide invaluable experience for its staff as well as the higher education sector in Macao at large. (para. 2.28)

1.6 **Recommendations**

The Panel puts forward thirteen recommendations for continuous improvement of the Program:

- 1.6.1 The University should affirm its commitment to an outcome-based approach (OBA) and establish a task force at the School level in order to have designated personnel and sufficient resources to oversee its progress and implementation. (para. 2.1.4)
- 1.6.2 The University should consider introducing relevant courses to strengthen the pedagogical classification of the Program Foundation or Program Core courses. (para. 2.8.7)
- 1.6.3 The University should review the list of Program Elective courses on offer to ensure overlap, if any, in course contents with the Program Foundation or Program Core is necessary and appropriate for integration purposes. (para. 2.8.8)
- 1.6.4 The University should provide training and support to enable teaching staff to embed outcome-based teaching and learning (OBTL) in delivering their courses. (para. 2.11.3)
- 1.6.5 The University should review and monitor the use of *Moodle* by teaching staff to ensure its minimum presence and consistency across all courses. (para. 2.11.4)
- 1.6.6 The University should provide ongoing language support to scaffold and enhance students' English proficiency over their entire study span. (para. 2.13.3)
- 1.6.7 The University should review the planned learning activities to ensure that all students have sufficient exposure to real world application of their economic knowledge. (para. 2.14.2)
- 1.6.8 The University should consider more systematically the assessment and moderation policies and mechanism in place in order to move away from norm-referencing into OBA to ensure equitable assessment outcomes across students. (para. 2.16.5)
- 1.6.9 The University should provide training and support to teaching staff so that they continue to compile assessment rubrics across all courses. (para. 2.17.1)

- 1.6.10 The University should seek mechanisms to make clear the assessment criteria to students in advance and to improve assessment feedback to students. (para. 2.17.2)
- 1.6.11 The University should hire more senior academic staff in the economics discipline who have expertise in curriculum development in order that they can provide leadership and mentorship to the growing number of junior academic staff. (para. 2.20.4)
- 1.6.12 The University should ensure that the QA office is sufficiently staffed and resourced so that it interacts proactively with faculties and schools to facilitate and monitor implementation at the faculty/school and course levels. (para. 2.26.3)
- 1.6.13 The University should capitalize on the expertise of the Business Advisory Board through regular meetings to inform the refinement as well as strategic development of the Program. (para. 2.27.5)

MUST's Responses to Panel's Thirteen Recommendations:

1.6.1 The University should affirm its commitment to an outcome-based approach (OBA) and establish a task force at the School level in order to have designated personnel and sufficient resources to oversee its progress and implementation. (para. 2.1.4)

Response: OBA has become a top priority at MUST. Following the Panel's recommendation, the School has fully adopted the OBA for all programs in academic year 2017-18 after the preparation and pilot run in academic year 2016-17.

1.6.2 The University should consider introducing relevant courses to strengthen the pedagogical classification of the Program Foundation or Program Core courses. (para. 2.8.7)

Response: The Program Planning Team (PPT) has addressed the Panel's recommendation by specifying the contents in one program core course, Special Topics in Economics (adding some content of Economic Thought). The PPT agreed with Panel's suggestion by specifying the contents in one elective course of Economic Forecasting and Industry Analysis (incorporating the content of gaming or tourism industrial economics).

1.6.3 The University should review the list of Program Elective courses on offer to ensure overlap, if any, in course contents with the Program Foundation or Program Core is necessary and appropriate for integration purposes. (para. 2.8.8)

<u>Response:</u> The School appointed two senior professors, who are specialized in Macroeconomics, Microeconomics, and Econometrics, as course coordinators. They have regular meetings with relevant course teachers on the syllabi and teaching plan to ensure that the overlap of topics in each course can be minimized. The elective course of Financial Modeling has already been removed from the new BAE program which was launched in 2016-17.

1.6.4 The University should provide training and support to enable teaching staff to embed outcome-based teaching and learning (OBTL) in delivering their courses. (para. 2.11.3)

Response: The School has organized a series of training and sharing sessions on OBA implementation and OBTL delivery, and also encouraged faculties to participate in relevant training workshops organized by the University Educational Development Centre.

1.6.5 The University should review and monitor the use of *Moodle* by teaching staff to ensure its minimum presence and consistency across all courses. (para. 2.11.4)

Response:

Faculty members at the School are encouraged to use the Moodle or other on-line teaching and learning tools provided by the University and the School will keep monitoring the utilization and effectiveness of these technical teaching aids.

1.6.6 The University should provide ongoing language support to scaffold and enhance students' English proficiency over their entire study span. (para. 2.13.3)

Response:

There are several English courses in the General Education (GE) for all undergraduate programs in the University, for which students must take in the first two-years of studies. In addition, the University has set English criterion (e.g., English test score in the College Entrance Exam or English interview) for the admission of students for this BAE program.

1.6.7 The University should review the planned learning activities to ensure that all students have sufficient exposure to real world application of their economic knowledge. (para. 2.14.2)

Response: The Program Planning Team agreed with the Panel's suggestion. The School will continue to encourage students to take part in extra-curriculum activities organized by the School as well as by the University. The School will also explore collaborations with industries to secure internship opportunities for students. Students will be encouraged to register for the Internship course in their third or fourth year. A compulsory general education course, University Life with one credit, is planned to be included in the curriculum for all undergraduate programs. Students are required to participate in certain number of organized talks/seminars so as to gain the credit.

1.6.8 The University should consider more systematically the assessment and moderation policies and mechanism in place in order to move away from norm-referencing into OBA to ensure equitable assessment outcomes across students. (para. 2.16.5)

Response:

School-wide implementation of OBA has been in place at the School where the BAE program is offered. The School has started the AACSB accreditation application in 2017, and followed the OBS-based course assurance and assessment standards as required by AACSB.

1.6.9 The University should provide training and support to teaching staff so that they continue to compile assessment rubrics across all courses. (para. 2.17.1)

Response:

The School has set the assessment rubrics for all courses during the preparation of OBA adoption in 2016-17, which, covering all course of BAE program, have been fully implemented in academic 2017-18.

1.6.10 The University should seek mechanisms to make clear the assessment criteria to students in advance and to improve assessment feedback to students. (para. 2.17.2)

Response:

In the School, teaching staff are requested to explain the assessment criteria to students at the beginning of the semester. We agreed that assessment feedback should be communicated to students in a timely manner so as to improve study progress. The University will fine tune the mechanisms on this regard to better serve the purposes.

1.6.11 The University should hire more senior academic staff in the economics discipline who have expertise in curriculum development in order that they can provide leadership and mentorship to the growing number of junior academic staff. (para. 2.20.4)

Response:

The Program Planning Team recognizes the need to recruit staff and acquire other

relevant resources for the new program, which requires careful planning. The School will actively pursue targeted human capital planning strategies to recruit faculties with strong background in economics and related disciplines, including hiring more senior academic staff who have expertise in program management. The School will also provide staff development opportunities for existing staff to update their skills.

1.6.12 The University should ensure that the QA office is sufficiently staffed and resourced so that it interacts proactively with faculties and schools to facilitate and monitor implementation at the faculty/school and course levels. (para. 2.26.3)

Response:

The University recognizes the importance of having QA office with sufficient staff and resources to monitor and evaluate QA implementation of faculties and schools. The university has provided more resources to the development of QA office. Senior QA officer has also been appointed to oversee the operation of the office.

1.6.13 The University should capitalize on the expertise of the Business Advisory Board through regular meetings to inform the refinement as well as strategic development of the Program. (para. 2.27.5)

Response:

The School appreciates the suggestion from the Panel. The School will work closely with its Advisory Board members to inform the refinement as well as strategic development of the Program. We will solicit their valuable comment and suggestion on program management and development through regular meetings. The School will also appeal for their support on student training and development.

Conclusion

The School appreciates very much the Accreditation Panel's time and effort in providing insightful comments and constructive feedback on the BAE Program Proposal. The Panel's valuable suggestions and recommendations have allowed us to review the issues raised carefully and fine-tune the relevant sections, which have been implemented after the launch of the new program.