Translation Version

Higher Education Quality Evaluationof Macao

Guidelines on Program Review

Higher Education Bureau

Government of Macao Special Administrative Region

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List of Abbreviations

ADRI	Approach-Deployment-Results- Improvement
EQAA	external quality assurance agency
DSES	Higher Education Bureau
Guidelines for EQAAs	Guidelines for External Quality Assurance Agencies
HEI	higher education institution
Macao	Macao Special Administrative Region
Panel	external evaluation panel
PR	Program Review
QA	quality assurance
SED	self-evaluation document

Preamble

- 1. This set of guidelines elaborates Program Review (PR) areas, requirements, criteria and process to enable higher education institutions (HEIs) in Macao Special Administrative Region (Macao) to make preparation for PR. This set of guidelines also serves as the basis for external quality assurance agencies (EQAAs) to conduct PR.
- 2. The roles and responsibilities of EQAAs and the terms of service are specified in the *Guidelines for External Quality Assurance Agencies* (*Guidelines for EQAAs*).
- 3. Refer to the relevant laws and regulations as well as government announcements for details of the higher education quality evaluation system of Macao, financial support and follow-up action, etc.
- 4. This set of guidelines applies to programs delivered in Macao and operated by HEIs of Macao.
- 5. DSES reserves the right to supplement the terms and conditions in this set of guidelines.

1. Introduction

- 1.1 PR is a means of evaluating educational quality applicable to programs to ensure that program quality sustainably improves, and that programs are up-to-date and can meet stakeholders' needs. Through regular external PR, good practices and areas of improvement are identified for continuous quality enhancement.
- 1.2 PR must be conducted according to relevant laws and regulations of Macao.
- 1.3 To undertake PR, HEIs should, based on their own needs, engage EQAAs with relevant evaluation experience and sound track records. For the principles of engaging EQAAs and the terms of evaluation services refer to the Guidelines for EQAAs.
- 1.4 HEIs must seek DSES's approval before engaging EQAAs. Upon completion of a PR exercise, HEIs must submit to DSES the final evaluation report for confirmation of the PR outcome within 45 days upon receipt of the PR report.
- 1.5 PR can be conducted in the form of individual programs or a cluster of programs. For the latter case, in order to facilitate the external evaluation panel (Panel) to make PR judgments effectively, it is compulsory to take into consideration the cost-effectiveness of the cluster, the commonalities of the programs within the cluster, and the reasonableness of the number of programs within the cluster.
- 1.6 PR is conducted based on the execution principle of peer review and, in general, using a paper-based review. Meetings or interviews between the external evaluation panel (Panel) and program leader(s) and/or relevant stakeholders can be arranged by EQAAs for HEIs concerned to make further clarification upon request or based on the practical needs of the programs being reviewed; whether a site visit is necessary depends on the Panel's decision-making by taking into consideration the institutional quality level/the quality level of the programs reflected in the documents provided by the HEIs concerned, the quality level of the evaluation at

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¹ This refers to the grouping of programs based on the definition of "narrow field" in *International Standard Classification of Education (2013)* by the United Nations Educational, Scientific and Cultural Organization (UNESCO) at http://www.uis.unesco.org/.

Program Evaluation level that HEIs concerned have ever conducted (if applicable), teaching and other facilities and equipment that are required to meet the specialities of the programs being reviewed, etc.

2. Guiding Principles of Program Review

HEIs of Macao must conduct PR based on the following guiding principles:

2.1 Quality Enhancement

PR is a regular external review of programs to ensure that programs remain up-to-date, can meet stakeholders' needs and better continuously for the purpose of ensuring the quality of higher education. Through PR, EQAAs review HEIs' improvements on programs and make recommendations for sustainable quality enhancement of programs.

2.2 **Student-centered**

Education is by nature student-centered. Under this core philosophy of education, the primary objective of PR is to ensure that HEIs can provide students with favorable and quality learning experience as well as learning environment so that they can attain the intended learning outcomes upon completion of the programs under reasonable circumstances.

2.3 Fit-for-purpose

HEIs differ in scale, mode of operation and educational philosophy, etc. As such, PR should be conducted on the basis of HEIs' stated program objectives to evaluate whether HEIs have adequate institutional systems, resources and operation for their programs to achieve the program objectives, and deliver the intended learning outcomes.

2.4 Evidence-based

Judgment is made on the basis of evidence to ensure objectivity, fairness and consistency of PR outcomes. Evidence includes the self-evaluation document (SED) prepared by HEIs for PR, and the solid empirical data collected by engaged EQAAs as well as the observations made by the Panel during meetings/interviews with program leader(s) and/or relevant stakeholders (if any) and during the site visit (if any). HEIs should be entitled to express their views and present evidence throughout the PR process.

2.5 **Transparent**

- 2.5.1 PR is conducted in an open and transparent manner. Information concerning PR areas, requirements, criteria and possible sources of evidence and process, etc. is detailed in this set of guidelines.
- 2.5.2 DSES reserves the right to disclose the whole or part of the evaluation report.

3. Program Review Areas, Requirements, Criteria and Evidence

- 3.1 PR is conducted to determine if the program being reviewed meets the program objectives and the intended learning outcomes and how far it has remained up-to-date. Program quality is determined on the basis of program outcomes, with a focus on whether the program delivers the intended learning outcomes, reflecting the HEI's competence and effectiveness in its operation. Under validity and reasonableness, inferences are made by the Panel to determine whether the HEI has appropriate resources, academic structure, strategies and operation, etc. to provide quality programs to meet its educational philosophy, purposes and goals, and whether the program is able to meet the program objectives and planned operational mode.
- 3.2 The HEI should be able to produce an SED, making special reference to its internal quality assurance (QA) mechanism and its external stakeholders' level of participation in promoting the revision and updating the program, as well as the effectiveness.
- 3.3 PR examines the following three areas of operation of the program:
 - 3.3.1 Program
 - Program Objectives and Intended Learning Outcomes
 - Admission Requirements and Selection Process
 - Program Structure and Content
 - Teaching and Learning
 - Assessment
 - 3.3.2 Resources and Support
 - Academic Leadership and Teaching and/or Research Team
 - Learning Environment, Resources and Support
 - 3.3.3 Internal Quality Assurance of Program
 - Program Development, Management, Monitoring and review
 - Partner Selection, Management, Monitoring and review (if applicable)

3.4 The PR areas, requirements, criteria and possible sources of evidence are detailed in **Annex 1**. The SED should contain appropriate evidence to demonstrate (a) the use by the HEI of its internal QA mechanism to assure the required quality levels, the stated objectives and the continuous enhancement of the program; (b) the efforts of the HEI to improve the program quality; (c) the implementation of the recommendations stated in the previous review or accreditation (if applicable). For the "Outline of Self-evaluation Document (For Reference Only)", refer to **Annex 3.1**.

4. Program Review Model

4.1 ADRI Model Applicable to

PR is conducted on the basis of the stated program objectives, intended learning outcomes and criteria under different areas of operation to evaluate the adequacy of the program being reviewed. During the PR process, in accordance with the three operational areas (see paragraph 3.3), the EQAA must adopt a model that aims to sustain quality enhancement (ADRI) to examine the performance of the program. The following is the ADRI model applicable to PR:

A: Approach

D: Deployment

R: Results

I: Improvement

For details of the ADRI model applicable to PR, refer to Annex 2.

4.2 **Peer Review**

Peer review is the execution principle of higher education quality evaluation system of Macao. Under this principle, evaluation must be conducted by peer experts. Peer experts include scholars leading relevant academic development and/or instructors of relevant programs/courses, academic experts who understand the education and cultural contexts of Macao, etc. and professionals of relevant industries.

4.3 The composition, the roles and responsibilities, as well as the code of conduct of the Panel, etc. are outlined in Chapter 4 of Section A and related annexes in the *Guidelines for EQAAs*.

5. Application for Program Review

- 5.1 The HEI intending to apply for PR must submit a PR proposal to DSES. The evaluation proposal should include details of the PR exercise (in the form of individual programs or cluster of programs), explanation of the engaged EQAA's compliance with relevant requirements (see paragraph 5.2) (attached with supporting documents), as well as reasons for selecting the EQAA, the budget for evaluation expenses, the schedule, the working language in the course of evaluation, etc.
- 5.2 When selecting an appropriate EQAA, the HEI should take account of its relevant evaluation experience, track records and reputation, etc.. At the same time, it is also necessary to consider and select the principles and requirements of the EQAA according to the actual needs of the HEI. Further details about the engagement of EQAAs are in Chapter 1 of Section A of the *Guidelines for EQAAs*.
- 5.3 If the HEI intends to have more than one program (i.e. a cluster of programs) reviewed in one single PR exercise, it should consult the selected EQAA on the feasibility and the cost-effectiveness of the exercise, and include the conclusion of the negotiation in the PR proposal.
- 5.4 To ensure fairness and consistency, PR has to be conducted in accordance with the requirements specified in this set of guidelines. It is only under exceptional circumstances which are substantiated by sound justifications that the HEI may be unable to fully comply with this set of guidelines on the PR areas, requirements, criteria and/or process; in such cases, the reason(s) for failing to comply with this set of guidelines (including expansion, reduction, modification), the proposed change(s) as well as their implications must be detailed in the evaluation proposal. Nonetheless, the proposed change(s) should not substantially diverge from this set of guidelines.
- 5.5 The HEI will be informed of the outcome of its PR application by DSES through a notification letter.
- 5.6 Upon receipt of DSES's approval of the PR application, the HEI should enter into a service agreement with its engaged EQAA, and must conduct the PR exercise in hand according to the specifications in the notification letter from DSES and the evaluation proposal approved by DSES. Details

- of the service agreement are outlined in Chapter 3 of Section A of the Guidelines for EQAAs.
- 5.7 The results for the PR application will generally be decided within 90 days.
- 5.8 If DSES deems it necessary, the applicant institution may be required to provide explanations, present evidence and supplementary information. Or, DSES will obtain technical support services in accordance with the provisions of the higher education quality evaluation system of Macao. Or, DSES will obtain opinions from other professional, academic entities or individuals, including consulting the Panel; in such cases, the calculation of the above period (paragraph 5.7) shall be suspended.

6. Program Review Procedure

- 6.1 Upon signing the service agreement, the EQAA must recruit members for the Panel and execute the service agreement according to the terms set forth in the service agreement and in Chapter 4 of Section A of the *Guidelines for EQAAs*. The EQAA can appoint the Panel only upon clearance of conflict of interest by the HEI, and must then send the confirmed panel membership list to DSES for record. The terms of service of the EQAA, and the roles and responsibilities as well as the code of conduct of the Panel are detailed in the *Guidelines for EQAAs*.
- 6.2 Upon commencement of a PR exercise, the HEI should designate a dedicated contact person to communicate with the case officer of the EQAA. To avoid conflict of interest, the HEI cannot contact the panel members directly, but should contact the EQAA via the case officer.
- 6.3 The HEI has to submit the SED to the EQAA according to the schedule set forth in the service agreement. The SED should illustrate how the HEI effectively ensures that its programs meet the prescribed academic levels. For the "Points to Note on Preparation of Self-evaluation Documents", see **Annex 3**.
- 6.4 The case officer is to conduct a preliminary review of the SED to ensure adequacy of the information before sending the document to the Panel for study.
- 6.5 The Panel is to hold the "Program Review Meeting" within 4 to 6 weeks upon receipt of the SED to gain a better understanding of the program being reviewed, and subsequently make PR judgments, including whether the following follow-up actions are necessary: (1) a request for clarification supplementary information from HEI: and/or and/or meetings/interviews with program leader(s) and/or relevant stakeholders; and/or (3) a site visit. In view that the Panel may come from various parts of the world, the "Program Review Meeting" should be conducted in the most cost-effective means (e.g. via teleconference call, videoconferencing or Skype, etc.), which is to be confirmed after negotiation between the Panel and the HEI.
- 6.6 The HEI has to provide written responses and/or supplementary information according to the schedule set by the EQAA.

- 6.7 Under normal circumstances, information collection ends upon receipt of supplementary information from the HEI.
- 6.8 If the Panel finds it necessary to meet with related program leader(s) and/or relevant stakeholders after considering the actual situations of the program being reviewed, the HEI concerned can arrange meetings/interviews between the Panel and relevant internal and external stakeholders, including program leader(s), discipline leader(s), staff, students, alumni, employers of alumni, etc. for triangulation. Since panel members may be located in various parts of the world, when making the arrangements of these meetings/interviews, the EQAA and the HEI can take into consideration the most cost-effective means, such as video-conferencing, informal site visits conducted by individual panel members, etc., which is to be confirmed after negotiation between the Panel and the HEI.
- 6.9 If a site visit is considered necessary, the Panel is to hold the "Pre-visit Meeting" (normally one day prior to the site visit) where the case officer, as instructed by the Panel, provides the following information: background information of the program being reviewed, analysis data and related documents, etc., and the major questions to be discussed during the site visit. For the "Site Visit Program and Arrangements" and the "Sample of Two-day Site Visit Program (For Reference Only)", refer to **Annex 3** and **Annex 3.1** respectively in the *Guidelines on Program Accreditation*.
- 6.10 The EQAA is to send the draft of the PR report to the HEI normally within 12 weeks upon receipt of all relevant information or after interviews (applicable to PR exercises without a site visit)/within 12 weeks after the site visit; and the HEI is to comment on the factual accuracy normally within 2 weeks upon receipt of the draft report.
- 6.11 The EQAA is to send the final PR report to the HEI normally within 2 weeks upon receipt of the HEI's comments on the factual accuracy of the draft report.
- 6.12 The HEI has to submit to DSES the final evaluation report for confirmation of the PR outcome within 45 days upon receipt of the PR report.
- 6.13 The confirmation procedure of the PR application will generally be decided within 90 days.
- 6.14 If DSES deems it necessary, the applicant institution may be required to provide explanations, present evidence and supplementary information. Or,

DSES will obtain technical support services in accordance with the provisions of the higher education quality evaluation system of Macao. Or, DSES will obtain opinions from other professional, academic entities or individuals, including consulting the Panel; in such cases, the calculation of the above period (paragraph 6.13) shall be suspended.

6.15 The workflow for PR is in **Annex 5**.

7. Judgment Principles and Outcomes of Program Review

- 7.1 PR aims to determine whether the program being reviewed meets the stated academic levels and to determine how far quality enhancement has taken place since the previous review or accreditation (if applicable). The HEI should strive for continuous enhancement to keep pace with the latest developments via internal and external evaluation.
- 7.2 PR adopts the Approach-Deployment-Results-Improvement (ADRI) model as the framework for assessment. It is conducted under the "fit-for-purpose" guiding principle. Through external review, the program is evaluated to see if it fulfills the stated objectives and purposes, and if it delivers the intended learning outcomes. PR must pay special attention to the student-centered nature of education to examine whether this philosophy is present in the program, which should provide favorable and quality learning experience as well as learning environment for students so that they can attain the intended learning outcomes upon completion of the program.
- 7.3 The EQAA must conduct PR on the basis of the evidence presented by the HEI, in accordance with the requirements specified in this set of guidelines and the *Guidelines for EQAAs*.

7.4 **Program Review Outcomes**

PR outcomes are to be recorded in the PR report together with other decisions and respective justifications. Possible PR outcomes include commendations, affirmations and recommendations as follows:

Commendations	Good practices that can be for reference by other similar programs offered by the HEI
Affirmations	In the SED, the HEI identifies areas where there are gaps and proposes a practicable improvement plan with a timetable. During the PR exercise, the Panel analyses that proposal and produces an affirmation, which may contain proposals for changes.
Recommendations	The Panel may identify additional gaps not listed in the SED and propose remedial actions.

8. Follow-up Action

- 8.1 Within 12 weeks upon receipt of the final PR report, the HEI must formulate an action plan to address the recommendations stated in the report. The EQAA must comment on and affirm the action plan which the HEI should then submit to DSES for record. DSES may give comments on the action plan.
- 8.2 The HEI must include the progress of the areas of improvement prescribed in the aforementioned action plan in its annual report to DSES.

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9. Observers

- 9.1 DSES may send observer(s) at its discretion to sit in meetings relevant to the PR exercise (including the "Program Review Meeting", meetings/interviews with program leader(s) and/or relevant stakeholders (if any), and the "Pre-visit Meeting" held one day prior to the site visit) and the site visit (if any) for the purposes of observing the evaluation process and identifying room for improvement in the flow and arrangements of the evaluation exercise, etc. Observer(s) must abide by the code of conduct as well as the terms of confidentiality applicable to the Panel. If the EQAA/the HEI raises a valid evidence-based objection to the presence of observer(s) on the basis of conflict of interest, the observer(s) concerned must not sit in the relevant meetings and the site visit. However, DSES can assign other observer(s) as replacement(s). Observer(s) are bound by the terms specified in the *Guidelines for Observers* (Annex 4) and must carry out their duties.
- 9.2 DSES is to send the name list of observer(s) to the HEI and the EQAA so that the case officer of the EQAA can deliver relevant documents and information, etc. to observer(s) as well.

Program Review Areas, Requirements, Criteria and Possible Sources of Evidence

- 1. All programs offered by local HEIs are bound by relevant laws and regulations of Macao.
- 2. It is understood that program objectives, operation and coverage are different across HEIs in order to meet the educational purposes, experiences and strategies of individual HEIs. Therefore, each HEI has to allocate resources in response to the claimed objectives and students' educational needs to ensure that an appropriate learning environment is provided, and students, under reasonable circumstances, can meet the stated program objectives and attain the intended learning outcomes. As such, students are fostered for their personal growth, and for a solid foundation for their further studies and employment. However, as HEIs' educational purposes and program objectives are different, there may be minor adjustments to individual areas with sound reasons, for example, the area on partner selection may be irrelevant to the program being reviewed.
- 3. PR aims to evaluate whether the program meets its objectives and the QA requirements of Macao through the different aspects in operation and development (i.e. the PR areas) and how far there were improvements since the previous review and/or accreditation. Although the different areas are listed separately in **Annex 1.1** and **Annex 1.2** for convenience and clarity, HEIs should be aware that the different aspects are closely related and linked; therefore, some of the requirements or evidence will be listed under different areas for elaborating the operation and development of the program.
- 4. Since the nature and the operation of different programs vary, the nature and the number of documents required may be different. HEIs are required to submit the evidence according to its normal operation; the list of documents or evidence listed in **Annex 1.2** is just for reference and is by no means exhaustive.
- 5. "Student-centeredness" is the guiding principle of the PR. In other words, the Panel has to ascertain whether the program being reviewed provides appropriate learning experience for the students and promotes the fulfilment of stated objectives and intended learning outcomes to protect students' interests. Reasonable inferences are made by the Panel to determine whether the HEI has the appropriate resources, academic structure, strategies and operation to provide quality programs to meet its

- educational philosophy, purposes and goals, and whether the program is able to meet its objectives and planned operation.
- 6. To understand how the Panel makes judgments on the basis of the PR requirements stated in this annex, refer to Chapter 6 of Section A of the *Guidelines for EQAAs*.

Program Review Areas, Requirements and Criteria

Review Area I – Program

Requirements

Program planning and design has to be in line with the HEI's academic development plan, taking into account its competence and capacity, so as to reflect the HEI's educational philosophy and educational goals, and meet the manpower needs of society. The program has to follow the outcome-based approach in design and delivery so as to meet the quality assurance requirements of Macao. If the program is to nurture students for professional qualifications, the program objectives, structure, content, learning experience, intended learning outcomes, learning environment, resources and support, and delivery must meet the requirements of the relevant industry/profession.

Criteria

1. Program Objectives and Intended Learning Outcomes

- 1.1 Program objectives must be aligned with the HEI's vision and educational purposes.
- 1.2 Program objectives and the intended learning outcomes must be specific and go hand in hand with each other, and continue to be in line with the HEI's academic development plan. The HEI should clearly define graduates' attributes, their expected roles and functions. In the case of professional accreditation/recognition, the program should meet the requirements of the profession.

2. Admission Requirements and Selection Process

- 2.1 The HEI must clearly define the admission policies, procedures and criteria of the program, which are implemented in a consistent, open and transparent manner. The HEI must explicitly state the requirements for the program enrollment. Special admission policy must be aligned with relevant laws and regulations of Macao, and specific recognition procedures of higher education qualifications and prior learning, including non-formal and informal learning, must be provided.
- 2.2 Responsible staff must fully understand and follow the admission requirements, and selection criteria and process. The academic unit

should state the maximum intake, enrollment projections and contingency plans in case of under-enrollment.

3. Program Structure and Content

- 3.1 The program design must meet its stated objectives and the intended learning outcomes. The program provides students with both academic knowledge and skills, including those that are transferable, which may influence their personal development and may be applied in their future career life. The program must have a coherent, integrated, harmonious and consistent structure so that students can have appropriate learning experiences, which ensures that they can achieve the intended learning outcomes when they graduate.
- 3.2 The structure and content of the program are subject to a formal institutional approval process.
- 3.3 If there is a credit system in the HEI, it has to abide by relevant laws and regulations of Macao. The academic unit should list out the number of credits allocated for each course, and the factors of consideration in the allocation.
- 3.4 If there are different components in the program, such as specializations, majors, electives, generic courses, etc., the weighting of each component must be reasonable and appropriate.

4. Teaching and Learning

- 4.1 The HEI should ensure that the program is delivered based on a "student-centered" guiding approach that stimulates students' motivation, self-reflection and participation in the learning process. Teaching and learning strategies should match the program objectives, course contents, intended learning outcomes and students' abilities, with adequate modes of teaching and media of instruction. The program allows for flexible learning paths adapted to the diversity of students and regularly evaluates and adjusts the modes of delivery and teaching methods.
- 4.2 If the program embraces practicum and/or workplace attachment, the academic unit must plan, manage and monitor the practicum/workplace attachment in accordance with the HEI's relevant policies and procedures. It must also provide students with clear and accurate information, as well as reliable and quality practicum and/or workplace attachment, and support.

5. Assessment

- 5.1 The academic unit should elaborate in detail the program's assessment strategies and arrangements, including assessment criteria, graduation requirements, engagement of external examiners (if any), policies and mechanisms to handle plagiarism and cheating, etc.
- 5.2 Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures, which should be published in advance. The assessment should allow students to demonstrate the extent to which the stated objectives or intended learning outcomes have been achieved.
- 5.3 Assessment must be based on the principle of constructive alignment, through which the moderation mechanism helps to ensure fairness, consistency and effectiveness in reflecting the standard of student attainment. When necessary, the academic unit should give students feedback, which is linked to advice on their learning process.
- 5.4 Assessors should be familiar with existing testing and examination methods. The academic unit should provide assessors with support for the development of their skills in this field.

Review Area II – Resources and Support

Requirements

The HEI must provide sufficient and appropriate teaching and learning resources and learning environment to facilitate effective learning. Qualified academic leader(s) must effectively lead the teaching and/or research teams to develop and operate a quality program and/or to engage in research activities. The HEI and/or the academic unit must provide adequate and appropriate academic counseling and other support services to students to ensure their well-being so that students can, under reasonable circumstances, complete the program and attain the intended learning outcomes.

Criteria

1. Academic Leadership and Teaching and/or Research Team

1.1 Academic leaders appointed by the HEI must be in a full-time position, and possess sufficient academic and/or professional knowledge in the relevant disciplines, and keep abreast with the development of the relevant disciplines or professions. The HEI must

- have its own academic staff, qualified in the program and adequate in number, complying with the established reference criteria.
- 1.2 The academic unit must provide academic staff with performance evaluation procedures to promote its pedagogic and scientific competency and keep abreast of the latest development. The academic unit has to recruit adequate qualified academic staff members for teaching and/or research activities. There are dynamics for staff development, such as through their continuing study in doctoral and post-doc programs. The program leader(s) and the academic staff should be able to make suggestions and take actions, which will contribute to the improvement in the effectiveness of the program, thus ensuring that learning outcomes are attained by students, to the monitoring and the review of the program and to the development of team collaboration and adequate communications.
- 1.3 The academic unit must embrace appropriate staff structures with adequate qualifications and experience. Performance indicators should help to assess teaching and learning effectiveness.
- 1.4 The HEI should encourage teaching and/or research staff to develop scholarly activities to strengthen the link between education and research and to innovate in teaching methods and the use of new technologies.

2. Learning Environment, Resources and Support

- 2.1 The HEI must provide sufficient, appropriate teaching and learning resources, as well as learning environment for students to facilitate effective learning.
- 2.2 The needs of a diverse student population, such as mature, part-time, employed and international students as well as students with disabilities (if applicable), and the shift towards student-centered learning and flexible modes of learning and teaching are taken into account when allocating, planning and providing the learning resources and student support.
- 2.3 The academic unit should be well aware of the need to provide adequate and appropriate student support, taking into account the diversity of the student body. There are adequate measures for pedagogical support and other support services during their academic life and for the promotion of their integration in the academic community, such as financing, career and employment counselling. The HEI must be well qualified administrative and support staff with opportunities to develop their competencies.

2.4 The academic unit must make good use of student learning records to facilitate student learning and serve for academic counseling.

Review Area III - Internal Quality Assurance of Program

Requirements

The HEI must set up an effective internal QA mechanism to ensure that its programs meet the QA requirements of Macao. The HEI must also review its programs regularly for the purpose of continuous enhancement and keeping abreast of the developments. If the program involves organization(s) that provide practicum, internship or activity space, the HEI must have proven mechanisms for partner selection and collaboration. The HEI must regularly monitor and review the effectiveness of the partnership. The internal quality assurance mechanism and decision-making of the HEI should be evidence-based and be informed by regular self-evaluations.

Criteria

1. Program Development, Management, Monitoring and Review

- 1.1 The HEI must have a policy for the development, management, monitoring and review of the program consistent with relevant laws and regulations of Macao and its internal QA mechanism.
- 1.2 All decisions regarding the program must be open and transparent, and made accessible to relevant stakeholders. The HEI should let stakeholders beware of and assume responsibility for QA and be engaged in internal QA at all levels of the HEI.
- 1.3 The HEI should allow qualified teaching and/or research staff to participate in the definition of program planning, design and development, program structure and content, credits, teaching and learning strategies, modes of teaching and media of instruction.
- 1.4 The academic unit should make a comparison of academic success between the program and related curricular units in different disciplines and/or academic units, and subsequently formulate improvement actions through monitoring the aforementioned academic success.
- 1.5 For teaching quality, the academic unit should collect feedback from stakeholders, such as conducting student surveys periodically, and the results of these surveys can be used to improve enhance quality.

- 1.6 The HEI must provide effective communication channels for students to express their views, appeals and complaints, and allow involvement of external stakeholders who are adequately informed about decisions on the program in internal QA.
- 1.7 Improvements resulting from the internal monitoring and approval procedures of the program should be documented. Relevant improvement plans should be recorded.
- 1.8 The HEI must periodically review the improvements that the program has ever accomplished as well as their effectiveness since the initial operation of the program or its previous review or accreditation (if applicable).

2. Partner Selection, Management, Monitoring and Review (if applicable)

- 2.1 The internal QA policy also covers any elements of an HEI's activities that are carried out by other parties that provide practicum, internship or activity space.
- 2.2 The appropriate decision-making bodies at the academic unit or program level must be responsible for monitoring the effectiveness of the partnership activities, and periodically review the effectiveness for improvement and for protection of students' interests.

Possible Sources of Evidence

Review Area I – Program

1. Program Objectives and Intended Learning Outcomes

- 1.1 Academic Development Plan (at academic unit level or institutional level)
- 1.2 Program and Curriculum Plan, relevant reference and data
- 1.3 Program handbook
- 1.4 Syllabus
- 1.5 Teaching staff to student ratio for different modes of teaching (e.g. lecture, laboratory, workshop, etc.)
- 1.6 Documentary proof of meeting the relevant professional accreditation or recognition requirement (if applicable)
- 1.7 Samples of requirements and guidelines for practicum and/or workplace attachment (if applicable) as follows:
 - 1.7.1 Practicum and/or workplace policies of the HEI
 - 1.7.2 Proposal of practicum and/or workplace attachment with clear statements on the objectives, intended learning outcomes, duration, assessment scheme, implementation plan, supervising and monitoring unit and/or responsible staff, etc.
 - 1.7.3 Proposed list of partner organizations for practicum and/or workplace attachment
 - 1.7.4 Agreement between the HEI and the partner organization(s), detailing the roles, responsibilities and obligations of both parties, division of work, monitoring and supervision of students, practicum assessment scheme, training for and management of supervisors assigned by partner organization(s), etc.
 - 1.7.5 Selection criteria for students applying for practicum and/or workplace attachment (if any)
 - 1.7.6 Practicum assessment tools and record samples
 - 1.7.7 Guidelines for workplace supervisors/partner organization(s)

2. Admission Requirements and Selection Process

2.1 Admission policy and requirements, including the policy and

implementation procedures for special admission (e.g. credit exemption) and learning support; statistics and profiles of students of the academic unit over the years, including students admitted under the special admission policy, their percentage to the total student population, and exempted courses and credits

- 2.2 Student selection criteria and process, and relevant admission guidelines; the execution unit (e.g. student selection committee/panel) and its terms of reference
- 2.3 Projection on student intake for the coming three years, including the maximum intake, breakeven number and contingency measures when the set targets are not met
- 2.4 Admission prospectus, program description, program leaflet guidebook, website, or any materials that cover the admission requirements and selection process
- 2.5 Course enrollment form and relevant guidelines
- 2.6 Information on the supplementary classes provided by the academic unit for students admitted under the special admission routes, including course outlines, samples of assessment papers, assessment criteria, marking schemes and marked scripts
- 2.7 Guidelines on supporting students with special educational needs

3. Program Structure and Content

- 3.1 Program handbook
- 3.2 Course outlines
- 3.3 Samples of lesson plans
- 3.4 Samples of teaching materials
- 3.5 Requirements and guidelines for practicum (if applicable)

4. Teaching and Learning

- 4.1 Program handbook
- 4.2 Course outlines
- 4.3 Samples of lesson plans
- 4.4 Samples of teaching materials
- 4.5 Samples of guidelines and worksheets of learning activities
- 4.6 Samples of graduation projects/ thesis and relevant guidelines.
- 4.7 Requirements and guidelines for practicum (if applicable)

- 4.8 Teaching staff to student ratio for different modes of teaching (e.g. lecture, laboratory, workshop, etc.)
- 4.9 List of facilities and/or equipment, and their use in recent years
- 4.10 Library resources and learning resources

5. Assessment

- 5.1 Assessment plan
- 5.2 Assessment schemes of individual courses, including assessment methods, weightings and mapping with intended learning outcomes
- 5.3 Samples of graduation project/thesis and relevant project/thesis handbooks
- 5.4 Samples of student assessment for final-year capstone courses such as coursework, graduation project, thesis and final examination. The samples normally include sample assessment papers, assessment criteria and marking schemes for the capstone courses for new programs, together with marked scripts
- 5.5 Samples of student learning records and statistical analysis of students' achievement and progression
- 5.6 Roles and responsibilities, membership list, minutes and records of examination board/committee, annual reports and samples of assessment reports considered by the examination board/committee
- 5.7 Policy on the appointment of external experts (e.g. external examiners and/or reviewers), their name list and profiles, roles and responsibilities, samples of assessment reports compiled by them, if applicable

Review Area II – Resources and Support

1. Academic Leadership and Teaching and/or Research Team

- 1.1 Staffing structure and organizational chart
- 1.2 Policies on staff appointment and evaluation of staff performance
- 1.3 Analysis of qualifications and experience of current teaching and/or research staff
- 1.4 Records of duty allocation of teaching and/or research staff
- 1.5 Performance targets, performance indicators, achievements, review and follow-up report of teaching and/or research staff
- 1.6 Staff development plan and participation statistics of teaching and/or research staff

2. Learning Environment, Resources and Support

- 2.1 Student handbook, list of activities and evaluation reports
- 2.2 Policies and guidelines on academic counseling and other support services
- 2.3 Relevant data and record of the utilization and effectiveness of academic counseling and other support services
- 2.4 Quantities and utilization rates of different amenities and facilities

Review Area III – Internal Quality Assurance of Program

1. Program Development, Management, Monitoring and Review

- 1.1 Samples of annual internal review reports for the program
- 1.2 Reports on various feedback collected both internally and externally and relevant follow-up reports
- 1.3 Reports on external benchmarking
- 1.4 Reports on internal program approval and follow-up reports
- 1.5 Internal quality assurance handbook, membership list and qualifications of key personnel in internal QA
- 1.6 Information and data used by the academic unit on decision-making
- 1.7 Professional accreditation/recognition reports (if applicable)

2. Partner Selection, Management, Monitoring and Review (if applicable)

- 2.1 Relevant policy documents
- 2.2 Relevant agreements and records

ADRI Model Applicable to Program Review

PR is conducted on the basis of the stated program objectives, intended learning outcomes and criteria under different areas of operation to evaluate the adequacy of the program being reviewed. During the PR process, in accordance with the three operational areas (see paragraph 3.3 of Chapter 3), the EQAA must adopt a model that aims to sustain quality enhancement (ADRI) to examine the performance of the program. The following is the ADRI model applicable to PR:

- A: Approach What is the purpose of curriculum, the intended learning outcomes and the needs of key stakeholders (including teachers, students, alumni, employers of alumni)? What is the strategy for achieving the program objectives and the intended learning outcomes? What are the measurements of success? What data was used to monitor progress over time? How were performance indicators developed?
- D: Deployment The degree to which the established strategies, structures and processes have been implemented across the organization and down through the organization; the extent to which staff members understand and have embraced the program's approach; how well the strategies, structures and processes have been integrated into the day-to-day operation of the program?
- R: Results What are the results? How well have the objectives of the program been achieved and the intended learning outcomes been fulfilled? How is performance monitored? How is the data related to the measurements of success (determined as part of the Approach) collected, collated and reported? To what degree are trends of improvement evident in the data?
- I: Improvement The process by which the appropriateness and effectiveness of the approach and its deployment are reviewed. How are results used to formulate improvement plans, which contribute to the continuous enhancement of the program? What improvements have been made since the initial operation of the program or its previous review or accreditation (if applicable)? How are the lessons learned, captured and shared? How has the program implemented the recommendations from the previous review or accreditation (if applicable)?

1. Approach

- 1.1 The program has clearly defined objectives and intended learning outcomes, which are in line with the HEI's academic development plan and educational purposes. Graduates' expected roles and functions are defined as well.
- 1.2 The program has clearly defined admission policies, admission process and criteria, which are implemented in a consistent, open and transparent manner.
- 1.3 Teaching and learning of the program are designed so that the program meets its intended learning outcomes. Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures, which should be published in advance.
- 1.4 The HEI has its own academic staff, qualified and adequate in number. There are adequate measures for pedagogical support and counseling service for students during their academic life and for the promotion of their integration in the academic community.
- 1.5 The program operates in accordance with the institutional policy for the development, management, monitoring and review of programs, consistent with relevant laws and regulations of Macao and its internal QA mechanism. This mechanism also covers activities that are subcontracted to or carried out by other parties. The HEI uses external benchmarking and data for internal review of programs.

2. Deployment

- 2.1 There is participation of internal and external stakeholders at all levels in planning, designing and reviewing the program and in the definition of teaching and learning strategies, modes of teaching and media of instruction.
- 2.2 All internal stakeholders are aware of and assume responsibility for QA and engage in internal QA at all levels of the program. Information and feedback are collected and adequately used to improve the program.

3. Results

- 3.1 The effectiveness of the program is demonstrated in terms of performance indicators, student progression and graduation, student satisfaction and feedback from alumni and employers.
- 3.2 As far as academic success in different disciplines/academic units is concerned, the program being reviewed and its related curricular units

are compared favourably with other programs (if applicable).

4. Improvement

- 4.1 Regular reviews are conducted to verify the results or effectiveness of the program and to keep the program updated.
- 4.2 The review process or internal QA mechanism is open and transparent to encourage understanding, support and participation from all relevant units and stakeholders.
- 4.3 Comprehensive and reliable evidence can be provided as proof of continuous quality enhancement.

Points to Note on Preparation of Self-evaluation Documents

- 1. The self-evaluation document (SED) is the written evidence provided by the HEI to substantiate its claim that the program has been continuously improved through its internal QA mechanism and therefore still meets the relevant standards that granted its accreditation (if applicable). So, the content has to be precise and accurate, and supplemented with facts and data in response to the different PR areas. If deficiencies are identified, improvement actions, monitoring and review of the deficiencies should be elaborated.
- 2. Prepared in a self-evaluative manner, the SED should be a succinct account of the operation and level of the program being reviewed, with improvement actions on the basis of evidence to address deficiencies identified in any of the PR areas to demonstrate the effectiveness of the HEI's internal QA mechanism under consistent principles. Evidence can be attached to the SED in the form of annexes.
- 3. When preparing the SED, the HEI should make reference to the PR areas and respective criteria stated in **Annex 1.1**, providing adequate evidence and information with documentary proof as listed in **Annex 1.2**.
- 4. The SED should be written in the medium of instruction to reflect the teaching and assessment of the program.
- 5. **Annex 3.1** is an outline of the SED for reference.

Outline of Self-evaluation Document

Cover Page

- Name of HEI
- Program Review
- Name of Program
 - If the PR is conducted in the form of a cluster*, please list out all the programs involved and prepare a separate SED for each program within the cluster.
- Date for Site Visit (if applicable)
- Name of EQAA
- Issue Date of Document

Content

- Table of Contents
- List of Abbreviations (if any)

Preamble

- A brief introduction about the background of Program Accreditation or Program Review that the HEI has ever experienced

Basic Information of Program

- Name of HEI
- Host Academic Unit
- Name of Program
- Academic Level
- Discipline
- Number of Credits
- Specialization or Major and/or Minor (if applicable)
- Major Mode of Delivery
- Major Medium of Instruction
- Commencing Year
- Maximum Intake
- Campus Address
- Major Teaching Venue (if outside campus)
- Other Information (if any)

^{*} PR can be conducted in the form of individual programs or a cluster of programs. For the latter case, in order to facilitate the external evaluation panel (Panel) to make PR judgments effectively, it is compulsory to take into consideration the cost-effectiveness of the cluster, the commonalities of the programs within the cluster, and the reasonableness of the number of programs within the cluster.

Main Text of Document

• An elaboration of supporting facts and data, presented in the order of the PR areas and corresponding criteria listed in **Annex 1.1** and demonstrating with documentary evidence as shown in **Annex 1.2** that the program meets relevant requirements. Here comes a combination of Annex 1.1 and Annex 1.2 which serves as an example for HEIs **for reference** when working on the SED. In the event of discrepancies, Annex 1.1 and Annex 1.2 shall prevail.

Review Area I – Program

1. Program Objectives and Intended Learning Outcomes

- 1.1 The academic unit should clearly state the design rationale and niche of the program, the objectives, intended learning outcomes, and graduate attributes expected for the program.
- 1.2 The academic unit can elaborate on how the program continues to respond to the vision and educational purposes of the HEI, and follows the academic plan, market demand and internal QA mechanism.
- 1.3 Evidence may include survey reports of market demand, documents on consultation, approval and benchmarking, and recent exit survey reports of graduates.
- 1.4 If the program has already attained or intends to apply for professional accreditation/recognition, the academic unit should in detail state the standards for attaining the accreditation/recognition. Relevant documents or reports should be provided as evidence of passing the accreditation/recognition.

2. Admission Requirements and Selection Process

- 2.1 The academic unit should state clearly the admission requirements, including age, language competency, program-specific skills (if applicable), work experience (if applicable), etc. and selection process. If there are arrangements for special admission, details such as factors for consideration, year of entry, course exemption arrangement, etc. should also be listed.
- 2.2 The academic unit also has to present its projection on student admission, including short-, mid- and long-term projection on the student number, class arrangement, quota for specializations or majors (if applicable), etc. The HEI should also prepare contingency measures for under enrollment to minimize the impact on enrolled students.
- 2.3 Evidence for admission arrangement may include survey reports of market demand, recent statistics on admission, financial reports, relevant policy documents, etc.

3. Program Structure and Content

3.1 The academic unit should elaborate in detail the program structure and content to demonstrate its coherence, integration and consistency.

- 3.2 If there is a credit system in the HEI, the academic unit should list out the number of credits allocated for each course, and the factors of consideration in the allocation. If there are different components in the program, including specializations, majors, electives, generic courses, etc., the weighting of each component should be listed out.
- 3.3 Evidence may include program handbook, course outlines, practicum requirements, etc.

4. Teaching and Learning

- 4.1 The academic unit should clearly elaborate the teaching and learning arrangements, including the strategies, medium of instruction, planned activities, required facilities, practicum (if applicable), etc.
- 4.2 Evidence may include a list of related facilities and recent utilization rates, sample teaching materials, sample topics for graduation projects or thesis, related library resources and web resources, a list of partner organizations and related guidelines for practicum (if applicable), etc.

5. Assessment

- 5.1 The academic unit should elaborate in detail assessment strategies and arrangements to demonstrate that the assessment is fair and effective, and that it is aligned with program objectives and intended learning outcomes, teaching and learning strategies, and that it reflects student competencies. Details of the elaboration should include assessment criteria, graduation requirements, engagement of external examiners (if any).
- 5.2 Evidence may include assessment schemes and weightings of different courses, sample assessment papers of capstone courses or courses of the last year, annual report of Examination Board or Committee, External Examiner reports (if applicable), etc.

Review Area II – Resources and Support

1. Academic Leadership and Teaching and/or Research Team

- 1.1 The academic unit should elaborate the structure and process in academic leadership to ensure that the program is receiving proper development, management and monitoring. Details of the elaboration should include roles and responsibilities of relevant committee, the qualifications of responsible staff, and relevant policy documents, etc.
- 1.2 Evidence may include performance indicators, recent review reports of the academic unit and related follow-up reports, membership list and qualifications of the teaching and/or research team, etc.

2. Learning Environment, Resources and Support

2.1 The academic unit should list out the support services available, including academic counseling, personal support, campus life and career counseling, etc., and an evaluation of the effectiveness of the

services.

- 2.2 The academic unit should demonstrate an effective learning record system that can provide evidence of student learning, and support the academic counseling required.
- 2.3 Evidence may include student handbook, a list of activities, evaluation reports, relevant policy documents, etc.

Review Area III - Internal Quality Assurance of Program

1. Program Development, Management, Monitoring and Review

- 1.1 The academic unit should clearly elaborate the mechanism in program development, management, monitoring and review. The academic unit should also demonstrate the effectiveness of the mechanism through the development process of the program.
- 1.2 The academic unit should list out the different feedback collection channels and data collected in order to demonstrate that the program is responding to the needs of society and the industry/profession.
- 1.3 Evidence may include internal QA mechanism handbook, membership list and qualifications of key personnel in internal QA, feedback collection means, survey reports, external benchmarking reports, agreement with or records of partner organizations, etc.

2. Partner Selection, Management, Monitoring and Review (if applicable)

If partner organizations are engaged in provision of practicum, internship or activity space, the academic unit should state clearly the relevant policies on the engagement, the selection process and the monitoring mechanisms to ensure that the collaboration is effective.

SWOT Analysis and Improvement Plan

• The HEI may adopt a SWOT analysis of the program (<u>S</u>trengths, <u>W</u>eaknesses, <u>O</u>pportunities and <u>T</u>hreats), including the proposed measures to address the identified weaknesses, an improvement plan and a timetable (if necessary).

Annex

• Annexes are listed according to the order of appearance in the main document.

Guidelines for Observers

DSES may send observers at its discretion to sit in meetings relevant to the evaluation exercise (including the "Program Review Meeting", meetings/interviews with program leader(s) and/or relevant stakeholders (if any), the "Pre-visit Meeting" held one day prior to the site visit (if there is any site visit)) and the site visit (if any) for the purposes of observing the evaluation process and identifying room for improvement in the flow and arrangements of the evaluation exercise, etc. Observers are subject to the code of conduct set forth in this set of guidelines, and must carry out their duties.

1. Code of Conduct for Observers

- 1.1 DSES provides the HEI being evaluated and the EQAA with the name list of observers. If the EQAA/the HEI raises a valid evidence-based objection to the presence of the observers on the basis of conflict of interest, the observers concerned shall not sit in the relevant meetings and the site visit (if any).
- 1.2 Observers must abide by the same code of conduct and terms of confidentiality as the panel members.

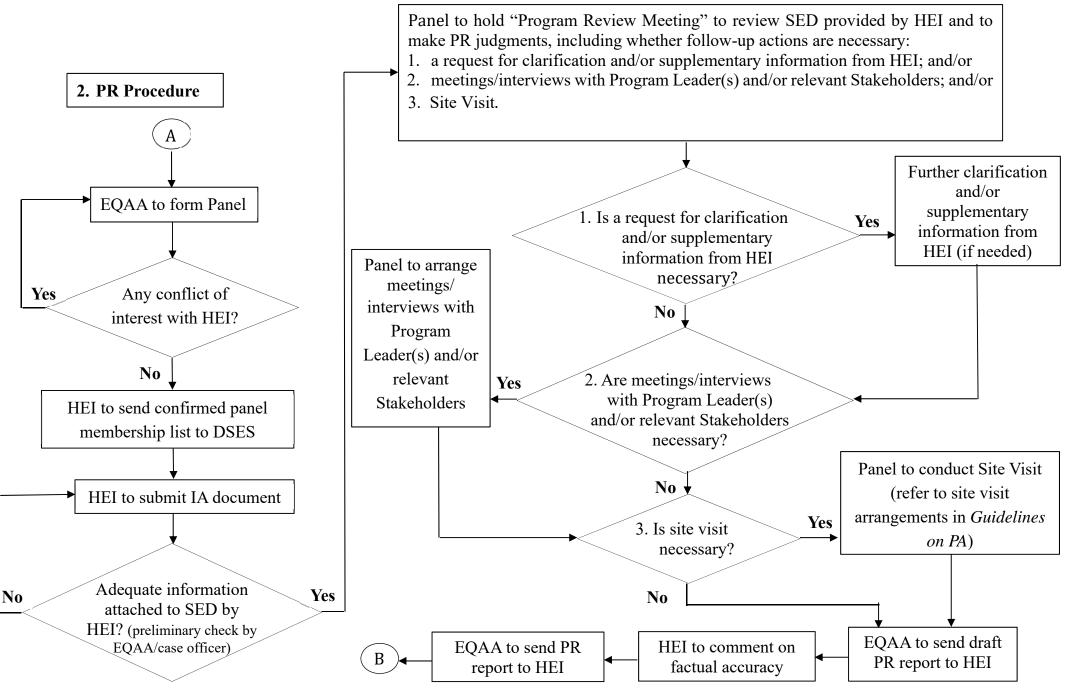
2. Procedures for Observation

- 2.1 Before the "Program Review Meeting", the case officer of the EQAA sends observers the requisite documents to be reviewed by the Panel.
- 2.2 Observers are not to participate in the discussion during the meetings with the Panel and the HEI's representatives.
- 2.3 Observers shall not record, video-tape or take photos at any time during meetings relevant to the accreditation exercise (such as the "Program Review Meeting", meetings/interviews with program leader(s) and/or relevant stakeholders (if any), the "Pre-visit Meeting" (if there is any site visit) and during the site visit (if any).

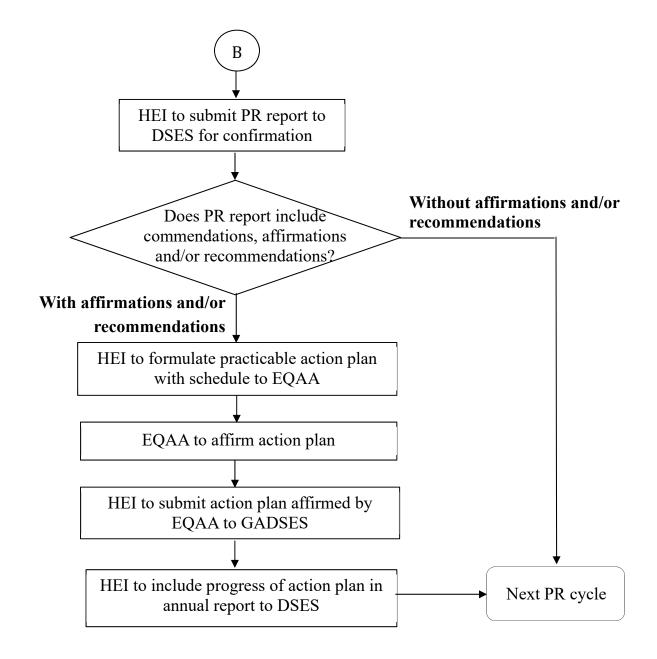
Annex 5

Workflow for Program Review

1. Application for PR HEI to submit PR proposal to DSES No Application Approved by DSES? terminated Yes HEI and EQAA to sign service agreement



3. PR Outcomes



Glossary

(In alphabetical order)

Academic Counseling and Other Support Services	Academic counseling and support includes services on course enrollment, academic advising, personal counseling, career counseling, life skills training, emotional and financial support, and special educational needs. The HEI may also offer other forms of support in accordance with its vision and mission, including but not limited to physical training, aesthetic development, overseas exchange and site visits.
Academic Unit	An academic unit refers to a unit within an HEI, such as Faculty.
ADRI Model (Applicable to PR)	This ADRI Model applicable to PR is a model that aims to sustain quality enhancement. It is a comprehensive approach of evaluating programs' academic levels and performance. Based on program objectives, this model reviews the following: approach of implementing the stated objectives (Approach), deployment of the implementation plan (Deployment), results of deployment (Results) and action plan for improvement (Improvement).
Case Officer	A case officer, in his/her capacity as the representative of the EQAA, is responsible for handling an evaluation exercise and acts as the contact point between the HEI being evaluated and the Panel.
Constructive Alignment	Constructive alignment is a principle that ensures that program objectives, intended learning outcomes of programs, teaching and learning activities and assessment tasks are aligned with one another so as to facilitate students to achieve the intended learning outcomes.
Discipline	A discipline refers to the grouping of programs based on the definition of "narrow field" in <i>International Standard Classification of Education (2013)</i> by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Evidence-based	This is one of the guiding principles of PR, under which judgment is made on the basis of evidence (including the self-evaluation document provided by HEIs, the solid empirical data collected by engaged EQAAs as well as the observations made by the Panel during meetings/interviews with program leader(s) and/or relevant stakeholders (if any) and during the site visit (if any)) to ensure objectivity, fairness and consistency.
External Review Panel (Applicable to PR)	This is the Panel formed by the EQAA under the principle of peer review. This Panel must execute external evaluations in accordance with this set of Guidelines and the <i>Guidelines for EQAAs</i> by making judgments and recommendations on the levels of the program being reviewed.
External Quality Assurance Agency (EQAA)	EQAAs are quality assurance bodies/organizations that provide evaluation services for HEIs. Such bodies/organizations must meet the requirements specified in Chapter 1 of Section A in the <i>Guidelines for EQAAs</i> and be approved by DSES before providing specified evaluation services for relevant HEIs.
Fit-for-purpose	This is one of the guiding principles of PR, under which engaged EQAAs must determine whether the HEI concerned has adequate institutional systems, resources and operation for its programs to meet the stated program objectives and for the students concerned to achieve the intended learning outcomes.
Learning Outcomes	Learning outcomes refer to a detailed description of what a student must be able to do on the completion of a program. When referring to learning outcomes, it is helpful to use verbs that are measurable or that describe an observable action. Such verbs help avoid misinterpretation by the academic unit (and students). The best outcomes will include a description of the conditions and the acceptable performance level.

Meetings/ Interviews with Program Leader(s) and/or Relevant Stakeholders	During the "Program Review Meeting", the Panel, based on the actual situations of the program being reviewed, decides whether it is necessary for them to have meetings or interviews with related program leader(s) and/or relevant stakeholders. If yes, the HEI concerned can arrange the Panel to meet with relevant internal and external stakeholders, including program leader(s), discipline leader(s), staff, students, alumni, employers of alumni, etc. for triangulation. Since panel members may be located in
	various parts of the world, when making the arrangements of these meetings/interviews, the EQAA and the HEI can take into consideration the most cost-effective means, such as video-conferencing, informal site visits conducted by individual panel members, etc.
Open and Transparent	This is one of the guiding principles of PR, under which evaluation is conducted in an open and transparent manner. Both HEIs and engaged EQAAs must abide by the same set of <i>Guidelines on Program Review</i> , which details the PR areas, requirements, criteria, possible sources of evidence and process, etc. when conducting PR. PR outcomes are to be included in final PR reports.
Partner Organization	A partner organization here refers to an organization that provides practicum, internship or activity space for programs offered by HEIs of Macao. In this set of guidelines, partner organizations are NOT collaborating organizations that provide higher education in Macao.
Peer Review (Applicable to PR)	Peer review is the execution principle of the higher education quality evaluation system of Macao. Under this principle, evaluation must be conducted by peer experts with experience relevant to PR. Peer experts include scholars leading relevant academic development and/or instructors of relevant programs/courses, academic experts who understand the education and cultural contexts of Macao, etc. and professionals of relevant industries.

Pre-visit Meeting	It is the preparatory meeting held by the Panel normally one day prior to the site visit (if any). In the "Pre-visit Meeting", the case officer, as instructed by the Panel, provides the following information: background information of the program being evaluated, analysis data and related documents, etc., and the major questions to be discussed during the site visit.
Program	A program in this set of guidelines refers to the teaching content, teaching activities and student assessment, etc. arranged according to the program objectives as well as the Program and Curriculum.
Program Objectives	Program objectives describe what an academic unit member will cover in a program. They are generally broader than students' learning outcomes. Examples include a) students will be able to define issues that a manager faces and the importance of management, and b) students will get acquainted with the historical perspective of management science evolution.
Program Review	Program Review is a type of evaluation under the higher education quality evaluation of Macao that aims to review higher education programs in Macao regularly to ensure the continuous quality enhancement of these programs to meet the prescribed academic levels.
Program Review Areas	Program Review areas are the various aspects of program development and operation as categorized into three major areas for specification of the requirements and criteria for PR.
Program Review Outcomes	The possible Program Review outcomes are "commendations", "affirmations" and "recommendations"; the PR outcome is detailed in the final PR report.
Program Review Report	It is the final report on the program being reviewed sent by the EQAA to the HEI concerned. The PR report covers the EQAA's observations, judgments and respective justifications according to the different PR areas, leading to the concluding PR outcome.

Quality Assurance Requirements of Macao	The QA requirements of Macao refer to the compliance with Law No. 10/2017 on <i>Higher Education Regime</i> and related administrative regulations of Macao, particularly the provisions of the higher education quality evaluation system of Macao, as well as the requirements specified in the evaluation guidelines of Macao.
Quality Enhancement	Quality enhancement is one of the guiding principles of PR as well as the aim of PR, that is, to enhance academic levels of programs.
Self-evaluation Document (Applicable to PR)	It is the document provided by HEIs for review by EQAAs when conducting PR; it is to be prepared in a self-evaluative manner. The SED for PR must elaborate how HEIs improve programs academically and they enhance program quality continuously with reference to the different PR areas, and the elaboration must be supported with relevant documentary evidence and data.
Site Visit	It is the Panel's visit to the campus of the HEI concerned on specified date(s) set forth in the service agreement to meet different stakeholders of the HEI, visit relevant equipment and facilities, and examine records and other supporting documents in order to fully comprehend the operation and level of the program being reviewed.
Student-centered	This is one of the guiding principles of PR, under which HEIs provide favorable and quality learning experience as well as learning environment for students so that they can attain the intended learning outcomes upon completion of the program under reasonable circumstances.
SWOT Analysis	The HEI concerned makes a critical analysis of the strengths, weaknesses, opportunities and threats of the program being reviewed, and proposes a practicable improvement plan.