

Executive Summary

Focus of Institutional Quality Audit

Founded in 2000, Macau University of Science and Technology (MUST) has grown rapidly. It is the largest multi-disciplinary university in Macau. MUST is situated on land in Taipa, Macau. It is authorized by the Macau Special Administrative Region (SAR) government to award academic degrees at doctoral, master and bachelor levels. To cater for different interests from different people, MUST offers programs that are conducted in English, Chinese, Portuguese and Spanish. In addition to local students, MUST attracts students from Mainland China, Hong Kong, Taiwan and other parts of the world. At the time of the audit there were 10,494 students.

MUST was established as a private, multidisciplinary university to serve the needs of the local community and society, the Pearl River region, the wider East Asian community and beyond. It seeks to promote economic diversification, to improve quality of life and develop the pool of highly educated talent, and to strengthen and sustain the competitiveness of Macau and the wider region.

The University is run by the Macau University of Science and Technology Foundation set up by entrepreneurs and business leaders in Macau.

To serve the needs of the 10,494 students MUST employs 466 full-time and 149 full-time equivalent part-time staff. There are 12 faculties or academic units delivering 65 approved degree programmes. There are 10 research units at university level and a total of 57 research laboratories. Administratively, there are 7 administrative units: Academic Registry; Human Resources Office; Student Affairs Office; Accounts Office; General Affairs Office; Estates and Facilities Office, and Information Technology Office.

MUST's mission is fourfold: to promote cultural exchange; to nurture intellectual growth; to foster economic development; and to further societal progress. Key priorities are: internationalization; teaching and learning; social and economic development; the practical nature of programs; research and scholarship; and cultural exchange. The University asserts that its distinctive identity is that it is multicultural, universally connected, socially responsive and transformative.

Programs Delivered by Macau University of Science and Technology

Doctor of Business Administration
Doctor of Philosophy in Management
Doctor of Philosophy in Law
Doctor of Philosophy in Chinese Medicine
Doctor of Traditional Chinese Medicine
Doctor of Philosophy in Chinese Medicines
Doctor of Pharmacology in Traditional Chinese Medicine
Doctor of Philosophy in integrated Chinese and Western Medicine
Doctor of integrated Traditional Chinese and Western Medicine
Doctor of Philosophy in Tourism Management
Doctor of Public Health
Doctor of Philosophy in Design
Doctor of Philosophy in Communication
Doctor of Philosophy of Management in Film industry

Doctor of Philosophy in international Relations
Doctor of Philosophy in Earth and Planetary Sciences
Master of Science (information Technology)
Master of Business Administration
Master of Public Administration
Master of Management Studies
Master of Science in Finance
Executive Master of Business Administration
Master of Science in Accounting
Master of Charity and Philanthropy Management
Master of Science in Business Analytics
Master of Applied Economics
Master of Laws
Juris Master
Master of international Economic and Commercial Law
Master of Laws in Criminal Justice
Master of international Arbitration
Master of Traditional Chinese Medicine
Master of Pharmacology in Traditional Chinese Medicine
Master of integrated Traditional Chinese & Western Clinical Medicine
Master of international Tourism Management
Master of Public Health
Master of Nursing
Master of Design
Master of Arts in Communication
Master of Management in Film industry
Master of Film Production
Master of Teaching Chinese as A Foreign Language
Master of Earth and Planetary Sciences
Master of Environmental Science and Management
Bachelor of Science
Bachelor of Business Administration
Bachelor of Applied Economics
Bachelor of Laws
Bachelor of Biomedicine
Bachelor of Traditional Chinese Medicine
Bachelor of Pharmacy in Chinese Medicine
Bachelor of international Tourism Management
Bachelor of Hotel Management
Bachelor of Food and Beverage Management
Bachelor of Arts (Art Design)
Bachelor of Arts in Art Design
Bachelor of Arts in Journalism and Communication
Bachelor of Arts in Foreign Language Studies
Bachelor of Pharmacy
Master of Hospitality Management
Master of Management in Production and Sales of Traditional Chinese Medicine
Bachelor of Nursing
Higher Diploma in Traditional Chinese Medicine Cosmetology
Higher Diploma in Traditional Chinese Medicine

Approach

This is a report of an Institutional Quality Audit conducted by the United Kingdom Quality Assurance Agency for Higher Education (QAA) of [Macau University of Science and Technology](#). The audit took place from 4 – 6 September 2017 and was conducted by a team of four auditors referred to as the External Evaluation Panel (Panel). The audit panel membership is set out in Annex 1 on page 34.

The Institutional Quality Audit was conducted at the request of the Macau University of Science and Technology. The audit is part of the Pilot Study by the Gabinete de Apoio ao Ensino Superior (GAES) of the Macau Special Administrative Region. For the purposes of this audit QAA acted as the recognised External Quality Assurance Agency (EQAA) appointed to conduct the audit.

Institutional Quality Audit (IQA) is the means of quality evaluation applicable to well-established higher education institutions in Macau with effective management and internal quality assurance mechanisms. Through regular external reviews, good practice and areas for improvement are identified for the purpose of continuous enhancement.

IQA is conducted according to the relevant laws and regulations of Macau. Outcomes of the IQA documented in the audit report will be submitted GAES for consideration and final decision.

Higher education institutions in Macau enjoy academic autonomy by law. IQA is conducted based on trust and respect under the premise of academic autonomy, subject to the following guiding principles^{2 3}:

Fitness for Purpose: IQA is a regular external review of a higher education institution to determine whether its governance, academic development and internal quality system are robust enough to ensure that its academic, training and / or research provisions meet its mission and remain current internationally in pursuit of excellence. IQA is conducted to determine the degree that the higher education institution fulfils its stated mission and objectives.

Evidence-based: IQA judgement is made on the basis of factual evidence provided by the higher education institution to ensure objectivity, fairness and consistency.

Transparency: The IQA is undertaken in a transparent manner. Information concerning the IQA areas, criteria, requirements and arrangements are detailed in a set of guidelines provided to the higher education institution and panel.

IQA examines the following three areas of operation of the HEI:

- Mission and objectives
- Institutional management, planning and accountability
- Quality Assurance:
 - Operational efficiency and effectiveness
 - Academic planning, management and development
 - Teaching and learning, research, social services and cultural heritage and innovation

² Higher Education Evaluation in Macau: Guidelines for External Quality Assurance Agencies 2014. Tertiary Education Services Office, Government of Macau Special Administrative Region. EQAAG1.0

³ Higher Education Evaluation in Macau: Guidelines on Institutional Quality Audit 2014. Tertiary Education Services Office, Government of Macau Special Administrative Region. IQA G1.0

In addition, during the first cycle of Institutional Quality Audit there are three integrated themes running through the audit, these are a) managing and planning effectiveness; b) student achievement; and c) quality management effectiveness⁴. Managing and planning effectiveness and quality management effectiveness are addressed directly in the three areas of operation referred to above. Student achievement is very much an outcome of the combined operational effectiveness of the University. The panel have therefore included a separate report section summarising student achievement.

The panel was provided with a self-evaluation conducted by the University. The self-evaluation was accompanied by documentary evidence to support the University's reflections and analysis. The panel conducted a desk-top analysis of the self-evaluation and documentary evidence and further evidence was provided at the request of the panel. An on-site visit to the University campus took place from the 4 – 6 September 2017. During the visit the panel held discussions with the President of the University, representatives of the University Council, executive members of staff, students, academic staff, professional and administrative support staff as well as alumni, graduates and stakeholders from Macau society. The panel were also provided with an opportunity to view key facilities. The purpose of the on-site visit was to verify the University's self-evaluation and to reach conclusions about the effectiveness of the University regarding the three areas of operation referred to earlier. The three areas of operation form the structure of this report.

Special Circumstances

There are no special circumstances to report. The panel reached a consensus on all conclusions.

A summary of the findings can be found in the section starting on page 4. [Explanations of the findings](#) are given in numbered paragraphs in the section starting on page 8.

⁴ Higher Education Evaluation in Macau: Guidelines on Institutional Quality Audit 2014. Tertiary Education Services Office, Government of Macau Special Administrative Region. IQA G1.0. Paragraph 3.5

QAA's conclusions about Macau University of Science and Technology

The QAA audit panel reached the following conclusions about the higher education provision at Macau University of Science and Technology.

Commended good practice

The QAA audit panel **commended** the following features of **good practice** at Macau University of Science and Technology:

- The inclusive approach to the development of the Strategic Plan and the determined efforts to enable faculty to truly understand strategic priorities is highly effective (paragraph 1.8).
- The annual monitoring process, which has a valuable and positive impact upon the day-to-day management of quality at the University (paragraph 3.5).
- The institution's commitment to the involvement of employers, who provide advice on programme development, support for internships, career advice and mentoring of students (paragraph 3.11).

Recommendations

The QAA audit panel makes the following **recommendations** to Macau University of Science and Technology:

- strengthen the consistency of its data collection to facilitate on-going trends analysis, which can more effectively inform action planning (paragraph 4.4)
- develop and implement a set of common standards for communicating with and informing students (paragraph 4.6)
- develop ways to further promote the use of the virtual learning environment so that data concerning teaching and learning can be collected and analysed systematically for quality assurance and enhancement (paragraph 6.8).

Affirmations

The QAA audit panel affirms the following actions already being taken by Macau University of Science and Technology:

- the steps being taken by the University to strengthen the students' voice by continuing to increase student involvement in university and faculty committees (paragraph 3.9).
- the steps being taken to maintain contact with its graduates and to further develop its engagement with alumni. (paragraph 4.8)

Summary of Findings

Mission and objectives

The panel concluded that the University has an appropriate mission, which enables the cultivation of talents that allows Macau to reach international standards both academically and professionally. The mission is clearly stated and is easily understood by all. The panel commends the University for the way in which the development of its Strategic Plan has been disseminated throughout the University in a way that supports operational planning and delivery at all levels. The University also has the Key Performance Indicators (KPIs) in place to monitor the implementation and achievement of the mission and vision. The University's mission and objectives are further supported by appropriate faculty and staff. The University has a sound internal quality assurance system in place, which assists academic units and programs to make continuous self-improvements.

Institutional management, planning and accountability

The University has established structures, both in terms of management responsibility and accountability through deliberative entities, which promote and support the delivery of strategic planning objectives. The University has an appropriate management structure in place that is coherently structured and the relationship between governance and management is clearly understood. Resources are effectively in line with the mission, direction of development, strategies and policies.

Quality assurance

The University is a learning institution; it is committed to quality enhancement and on-going development. It is evident that decisions are based on valid data and the information provided leads to informed judgements. Annual monitoring and reporting is a particular strength and is commended. The intention of the University is to further strengthen the monitoring process by establishing a cycle of periodic reviews, which the panel welcomed. The panel also noted the level and scale of external involvement, which was very effective in ensuring that programmes are current and relevant academically and professionally. The commitment of employers to providing advice on programme development and support for internships, career advice and mentoring of students demonstrates a high level of engagement. The panel affirms the University's commitment to strengthening the students' voice by increasing student involvement in university committees and faculty committees. It is evident that the institution intends to upgrade academic governance systems and procedures to rank it alongside similar institutions worldwide. The panel further concluded that the internal systems and processes ensure that standards are maintained, and academic and research services develop graduates with the required attributes.

Operational efficiency and effectiveness

The University monitors and manages its operational efficiency and effectiveness well. The University has appropriate performance indicators in place and collects related information and data regularly for review. Two recommendations are made: one advises the University to strengthen the consistency of its data collection to enhance action planning; the second relates to the need to have a set of common standards for communication with and informing students. The two recommendations do not indicate significant weakness but focus on enabling the University to enhance its operational efficiency and effectiveness.

Academic planning, management and development

Academic planning, management and development are aligned with the University's mission and objectives. The University's senior panel were found to be committed and genuinely reflective academic leaders. Academic leaders and academic staff present a strong profile, and all are supported through a robust approach to appraisal and development. A strong commitment of all to the strategic objectives, and academic development, of the University is evident.

Teaching and learning, research, social service and cultural heritage and innovation

Cultural heritage and innovation are firmly embedded in the objectives of teaching. Curriculum design is outcome-based and student-centred, and is aligned with local and international standards. Research activity has developed exponentially since the founding of the University and adequate and appropriate resources have been made available to support this growth. Social progress is central to the University's mission and values and the development of academic programmes takes account of the needs of Macau society.

Student achievement

Student achievement is centrally located within MUST's mission – “to nurture intellectual growth”. Its vision for student achievement is set out in the Strategic Plan where a broad view of student achievement is evident. Student achievement is viewed not only in academic terms but also incorporates student development, academic achievement and the ability of students to contribute to social progress. The panel concluded that the University has a strategic approach to managing student achievement, which is embedded in the mission and vision of the institution. There are clear operational guidelines aimed at ensuring the continuous improvement of achievement and the senior committees of the University have robust oversight of both academic and non-academic achievement. Key Performance Indicators provide a sound framework for monitoring and evaluation. Strong evidence exists to demonstrate the success of the University in ensuring its students achieve academically, personally and socially.