MALAYSIAN QUALIFICATIONS FRAMEWORK (MQF) VERSION 2.0 DRAFT

STAKEHOLDERS’ CONSULTATION

Malaysian Qualifications Agency
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Mariott Hotel, Putrajaya
**CONTENTS**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foreword</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Section 1: Malaysian Qualifications Framework (MQF)</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Background</td>
<td>4</td>
</tr>
<tr>
<td>1.2 The Need for a Malaysian Qualifications Framework</td>
<td>5</td>
</tr>
<tr>
<td>1.3 Implementation of Malaysian Qualifications Framework and Quality Assurance Arrangement</td>
<td>6</td>
</tr>
<tr>
<td>1.4 A Brief Report of Malaysian Qualifications Framework Journey to 2025</td>
<td>7</td>
</tr>
<tr>
<td>1.5 The Rationale for a Review</td>
<td>8</td>
</tr>
<tr>
<td>1.6 Focus of Review - Malaysian Qualifications Framework Version 2.0</td>
<td>10</td>
</tr>
<tr>
<td>1.6.1 Principles Guiding the Review</td>
<td>11</td>
</tr>
<tr>
<td>1.6.2 Findings</td>
<td>12</td>
</tr>
<tr>
<td>1.6.3 Recommendations</td>
<td>13</td>
</tr>
<tr>
<td>1.7 Moving Forward</td>
<td>13</td>
</tr>
<tr>
<td><strong>Section 2</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Statutory Objectives of Malaysian Qualifications Framework</td>
<td>15</td>
</tr>
<tr>
<td>2.2 Definition of Malaysian Qualifications Framework Version 2.0</td>
<td>16</td>
</tr>
<tr>
<td>2.3 Key Features</td>
<td>16</td>
</tr>
<tr>
<td>2.4 Scope of Framework and Sectors</td>
<td>17</td>
</tr>
<tr>
<td>2.5 Qualifications</td>
<td>18</td>
</tr>
<tr>
<td>2.6 Level of Qualifications</td>
<td>18</td>
</tr>
<tr>
<td>2.7 Purpose of Level Descriptors</td>
<td>19</td>
</tr>
<tr>
<td>2.8 Learning Outcomes</td>
<td>20</td>
</tr>
<tr>
<td>2.8.1 Scope of the Domains of Malaysian Qualifications Framework Version 2.0</td>
<td>20</td>
</tr>
<tr>
<td>2.8.2 Summary of Learning Outcomes in Malaysian Qualifications Framework version 2.0</td>
<td>22</td>
</tr>
</tbody>
</table>
2.8.3 Applications of Learning Outcomes
26

2.9 Qualification Title / Nomenclature
26

2.10 Credits
27

2.11 Qualifications Profile
29

2.12 Pathways for Individuals and Lifelong Learning
33

2.13 Level Descriptors
33

Appendices

Appendix 1: Overview of Malaysian Qualifications Framework Version 2.0
34

Appendix 2: Malaysian Qualifications Framework Version 2.0: Level Descriptors
FOREWORD

Qualification Frameworks are not static statements in perpetuity. They are dynamic and would require periodic revisions, to serve their purpose in higher education systems that are constantly changing. It is true for Malaysia as it is for most countries, in the world, where higher education systems are constantly striving to keep abreast of societal changes. These changes effect the daily lives of citizens in one way or another and include the changing industrial structures, the result of global trade practices, the pressures to innovate to remain competitive, sustainability considerations and the philosophical desire to ensure equality and equity for all group to actively participate and benefit from national development and wealth. The revised Malaysian Qualifications Framework (MQF) presented in this report is a response by the MQA to the call by Malaysians to make the framework more responsive to better, higher quality and relevant post-secondary education.

This consultation report brings together an alignment to serve three expectations. They are, a more robust framework to support a world class academic environment; to eliminate as much as it is possible the perceived divide between academic and Technical, Vocational, Education and Training (TVET) qualifications in terms of quality, relevance, standards and rigour; and finally to establish a strong relationship between the two and lifelong learning. This relationship forms the central core of the revised framework’s direction. The report recognises, prevailing tensions, especially between higher education and TVET and presents a unified approach to learning outcomes especially up to Advanced Diploma (Level 5) and recognises the specific demands of the two sectors beyond that.

Frameworks are only as good as the vigour with which they are applied. This requires the full support and cooperation of all those actively involved in the promotion and sustenance of the systems. This will include government, policy makers and institutions. MQA has full confidence that this will be done, just as it was done when the first version of the MQF was introduced in 2007 and implemented in 2011.

Dato’ Prof. Dr. Rujhan Mustafa
Chief Executive Officer
Malaysian Qualifications Agency
2017
SECTION 1  
Malaysian Qualifications Framework Version 1.0

1.1 Background

The social, economic, political, competitive and sustainable development of nation states is highly dependent on the strengths and quality of its educational systems from early childhood to continuous lifelong learning. In higher education, among the many policy and related initiatives during the last decade, the framing of national qualifications, globally, has been seen as an important and key initiative in improving learning, skills and competencies in supporting national policy and development goals. In parallel to the creation of National Qualification Frameworks (NQF), there are regional qualifications frameworks as members of the various regional communities such as in Europe, Africa, Middle East and in South East Asia---the ASEAN (Association of South East Asia Nations), which prepare nations to participate in regional developmental agendas effectively. In the case of Malaysia, prepares citizens to participate in regional developmental agenda effectively.

In Malaysia, the importance of the role of higher education and training institutions is to contribute to the nation’s social, economic and political development through the production of quality citizens, a highly skilled and talented workforce, new knowledge has been unambiguously acknowledged.

These developments have been guided broadly by the National Education Philosophy. Empowering the actualization of the policy is Malaysia Education Blueprint 2015-2025 (Higher Education)\(^1\) which outlines the strategies, plans, key performance indicators, responsible departments, institutions and agencies within a number of strong enabling legal frameworks. The Malaysian Qualifications Framework (MQF)\(^2\) which was approved under the Malaysian Qualifications Agency Act, 2007, has a key role within these complex arrangements, i.e. to set qualification standards for all qualifications in the higher education and training sectors. A qualification awarded by a registered institution represents what a graduate has acquired, in terms of knowledge, skills, competencies and value, upon successful completion of a named programme of study. It creates an eligibility to seek various benefits from it.

\(^1\) Ministry of Education Malaysia (2015), *Malaysia Education Blueprint 2015-2025 (Higher Education)*. Putrajaya, Malaysia

\(^2\) Malaysian Qualifications Agency (2007), Malaysian Qualifications Register. Petaling Jaya, Malaysia
All programmes and qualifications within the higher education and training sectors are subjected to the MQF since 2011. This Framework is the instrument which sets national classifications of qualifications, levels of learning achievements based on learning outcomes, prescribed minimum academic load at each level and is associated with a qualification title. “No programme will be accredited unless it is in compliance with the Framework” is set in the legislation. It underpins the quality assurance system practiced by Malaysian Qualifications Agency (MQA), the guardian and is custodian of MQF.

An accredited programme/qualification indicates that the programme is quality assured and it has fully satisfied all the quality standards. The public is duly informed when such qualifications are registered on the Malaysian Qualifications Register (MQR)\(^3\). As a principle today, the national stakeholders as well as the premise for recognition at international level recognize the quality assured-accredited programmes.

1.2 The need for a Malaysian Qualifications Framework

Prior to the establishment of the Framework, there were various qualifications norms and practices set by the Lembaga Akreditasi Negara (National Accreditation Board, LAN) for the private higher education sector since 1997. The public supported institutions, on the other hand, are subjected to the requirements of the various departments such as quality assurance unit and department of higher education, teacher’s training institutions, polytechnics and community colleges under the then Ministry of Education (MOE) while Training Institutes and centres were associated with Ministry of Human Resources (MOHR) and other line ministries. LAN had rationalized, systemized and set the minimum requirements of programmes at certificate, diploma, advanced diploma and degrees offered by the private higher education institutions for purpose of accreditation. However, overall there were multiple qualifications systems, local and imported with varied players in the public and private education and training sectors.

A milestone decision agreed by all stakeholders was made in 2007, to develop a national qualifications framework and establish the MQF. The MQA Act 2007 sets MQF as an overarching framework for all post-secondary qualifications, with a set of objectives to be served and serviced by MQA. The process of adopting the Framework has been developmental-oriented and incremental but, slow and challenging.

1.3 Implementation of Malaysian Qualifications Framework and Quality Assurance Arrangement

The MQF sets basic qualifications standards rationalized, streamlined, and consolidated to cover all Malaysian post-secondary qualifications of the various sectors. Simply stated, the MQF and the learning outcomes it advocates are vital parts of the quality assurance practices of the MQA. The practice of programme accreditation focuses on inputs, systems, resources, outputs and measurable outcomes. International good practices and conventions require all nationally conferred qualifications, subject to robust quality assurance assessments, in order to ensure the quality of the learning experience which is transparent, consistent and recognized by users of the qualifications locally and internationally.

The quality assurance standards will address seven areas as provided in the Code of Practice for Programme Accreditation (2nd edition, 2017) which incorporates the learning outcomes in all relevant aspects of the programme design and delivery aligned to programme development and delivery; assessment of student learning; student selection and support services; academic staff; educational resources; programme management; and programme monitoring, review and continual quality improvement as part of an institutional management and assurance system.

Learning outcomes must be made clear in the educational objectives of a programme at the course level, through constructive alignment and guided by the template/format provided. Teaching, learning and assessment strategies and methods are critical items in the accreditation exercise in the programme design and are assessed and verified in programmes accreditation exercises. The internal quality assurance system helps to inculcate institutional quality culture with regular internal monitoring and assessment whilst institutions concurrently seeking new and innovative ways of teaching, and assessment to enhance learning.

All academic and training programmes leading to the conferment of named qualifications are subjected to the three (3) stage assessment cycle. The process begins with an application for provisional accreditation to the Agency and approval to conduct the programme from Ministry of Higher Education (MOHE). On maturation of the programme, it will undergo an assessment for full accreditation and on receiving the full accreditation, subsequently it will be subjected to a further maintenance audit every five years. Those universities that have been granted self-accreditation powers must conduct similar internal processes to assure the quality of their programs.
Programmes which lead to professional recognition of regulated occupation/profession are subject to collaborative arrangement with a number of professional bodies in assessment and accreditation of these programmes and qualifications as the standards for accreditation is set by them.

The accredited programmes are registered in the MQR, which undertakes the role of National Information Centre for all accredited and recognized programmes and qualifications in Malaysia. Currently there are over 11,000 programmes listed.

1.4 A Brief Report of Malaysian Qualifications Framework Journey to 2025

The development of MQF version 1.0 was initiated by Lembaga Akreditasi Negara in 2002 as it was challenged by the practices of programmes and qualifications of private higher education institutions. Table 1 briefly explains the journey from 2002 to 2016 and the next phase of MQF till 2025.

Table 1: Chronology of Malaysian Qualifications Framework (MQF) from 2002-2016 and the next phase of MQF till 2025.

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<th>Chronology</th>
<th>Milestone</th>
<th>Phases</th>
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<tr>
<td>2002-2005</td>
<td>LAN seeking general consensus</td>
<td>Exploring and drafting</td>
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<td>Team drafting MQF and stakeholder consultations</td>
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<td>2006-2007</td>
<td>Drafting and refining MQF proposal and the Bill</td>
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<td>MQA Act 2007</td>
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<td>2008-2010 (Preparatory Phase)</td>
<td>MQA’s establishment</td>
<td>Laying foundation</td>
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<td>Preparing foundation, policies, regulations, systems and instruments</td>
<td>Engagements</td>
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<td>Dealing with legacy qualifications</td>
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<td>Establishment of MQR</td>
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<td>Socialising MQF and new QA system</td>
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<td>Capacity building</td>
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### Chronology

<table>
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<th>Phases</th>
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| 2011-2015       | - 01/01/2011: compliance for all new ‘Enforcement’ of MQF programmes seeking accreditation  
                 - New standards and new national policy goals  
                 - Engagement with stakeholders  
                 - Impact:  
                   ✓ Ensure implementation of MQF and QA system to all higher education providers  
                   ✓ Findings of Comparability projects (NZ/HEEACT)  
                   ✓ Opportunity to widen access, progression, lifelong learning as well better quality TVET outcomes  

2016-2025   | - Enhancement MQF and MQA as the overarching framework, QA and recognition authority for all qualifications  
              - Prepare alignment to AQRF ++  
              - MQF 2 and single common QA system for all  
              - Coordinated, aligned system shared resources, harmonised standards, Framework alignment and whole nation compliance to MQF  
              - Improve and institutionalized flexibility, choices, access, pathways and mobility  
              - Globalization of MQF  

### 1.5 The Rationale for a Review

The implementation of the MQF by Higher Education Providers (HEPs) in Malaysia (Phase 1) began seriously in 2011 and continued through 2015. Implementation was through programme accreditation collaboratively with HEPs through a series of consultations, dialogues, capacity building workshops as well as a number of induction seminars. The collegial approach helped in a number of ways including the HEPs level curriculum statements reflected a clarity of outcomes and universally accepted domains which resonated well with the Malaysia Education...
Blueprint 2015-2025 (Higher Education). The descriptors as presented by the MQF were applicable universally to all types of programmes and these were also comparable to regional frameworks and other national qualifications frameworks and systems.

MQF also acted catalytically in building a community of practice around Outcome-Based Education (OBE) among the HEPs, facilitated the widening of access to higher education through the Accreditation of Prior Experiential Learning (APEL), promotes a variety of flexible learning opportunities and learning pathways between levels and sectors. Further value was also obtained as these initiatives contributed to the enhancement of the quality assurance processes at HEPs and helped in the accreditation of programmes by MQA. Among many other benefits as a result of all these was the national and international recognition of Malaysian qualifications.

Some important lessons were learnt through the Phase 1 implementation of the MQF and remains vital in moving forward. These include:

i. the importance to have an ecosystem around the implementation of the MQF made up of government policies and regulations buttressed by specialised agencies;

ii. the necessity and the practicality of having one central agency which was mandated to drive the quality assurance and MQF in higher education and training;

iii. the capabilities and capacities of HEP to provide quality education and training through clear commitment, effective systems, effective programme design and delivery, sufficient qualified facilitators, infrastructure and conducive environment to provide authentic learning opportunities; and

iv. continuous dialogue with stakeholders and simultaneously building the capacities of client institutions.

Despite all of the above-mentioned gains, there is awareness at various levels of governments and MQA that Malaysia’s implementation of its national qualification framework is still a work in progress with barely six years of experience. This was noted in the older NQF systems that a qualifications framework acceptance and internalisation that considerable time. It is recognised that In the meantime, major changes have been taking place at the workplace globally, atomization and the rapid changing nature of jobs; the focus on individual competencies; higher education itself is experiencing yet another major shift with the massive use of technologies,

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4 Ministry of Education Malaysia (2015), Malaysia Education Blueprint 2015-2025 (Higher Education) – Putrajaya, Malaysia
especially in the delivery of services and perhaps, most importantly, the demand for greater internal efficiencies of systems. It therefore, becomes necessary for the MQF to undergo periodic review taking stock of changes in the ecosystem, the shifts in delivery services and the higher expectations of citizens of the quality of higher education and its products in the country.

The next section will draw attention to the main focus of the review.

1.6 Focus of Review - Malaysian Qualifications Framework Version 2.0

The main strength of the MQF is due to the fact that it was developed with stakeholders, supported national policies and centrally driven by the MQA, its system and key partners. MQF have been extended and contextualized in Programme Standards by disciplines, with standards for named qualifications assisting programme design and delivery by HEPs. This review revisits MQF as a unified and comprehensive framework to set standards and serves the Malaysian community and new goals. The review further aligns itself to national policy goals and its recent iterations as well as in the context of regionalization and greater movement of Malaysians wishing to work in the global environment. In conducting the review, MQA considered MQF in relation to the following aspects:

i. **National policy goals**: At the national level, the purpose of the MQF is to support the National Education Philosophy (Preamble of Education Act 1996) as well as the various policy goals stated in Malaysia Education Blueprint 2015-2025 (Higher Education) that highlights 10 shifts. Shift 1 describes the overriding mission of the HEPs to produce graduates who are holistic, entrepreneurial and balanced in their outlook and a very strong emphasis is on importance of transferable skills, personal development, ethics other the discipline knowledge or STEM requirements. it subscribes to the eight (8) learning outcomes listed in MQF. The eight includes the nine (9) listed by MOHE.

ii. **External comparability and recognition**: An impact of globalisation is the increase in the mobility of persons in the skills and services sectors across borders with their Malaysian credentials. To a large extent, recognition depends on the quality of qualifications, and the quality assurance system and qualifications framework from countries of origin, in our case Malaysia. The NQF and accreditation system provides

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5 Ministry of Education Malaysia (2015), Malaysia Education Blueprint 2015-2025 (Higher Education) – Putrajaya, Malaysia
transparency, clarity and assurance of knowledge, skill and competencies. No two Frameworks are identical as there are always differences between Frameworks. The normal practice is to apply ‘the best fit approach’ in a comparability exercise. This review critically appraised the Malaysian Framework vis a vis its international peers as it is important that the national qualifications frameworks have a legal basis, managed by competent mandated authority and be comparable to regional and/or selected qualifications frameworks of other nations. The comparability criteria includes the levels, learning outcomes, the levels descriptors, the contextual, technical and social matching, credit systems duration, entry points and quality assurance system.

iii. **Relevance to current industrial, business and broader societal needs:** Malaysia’s proposed investment in the skills (TVET) sector to enhance the quality of its labour force as well as its desire to see investments in post-secondary education has tangible practical returns to society in general demands a qualifications framework that is wrapped around these intentions while maintaining academic rigour and ethos.

1.6.1 **Principles Guiding The Review**

The review was guided by the following principles:

i. The proposed changes to the features of the Framework are intended primarily to clarify, update, distinguish, strengthen and ensure the inclusive nature of the Framework. It should also be intrinsically linked to national aspirations of developing quality citizens.

ii. That the MQF and its systems be able to inform learners, employers and the wider community clearly of the knowledge, skills and competencies/abilities achieved upon successful completion of the studies and to support future directions of the learners, within the individual programme designs.

iii. In as far as it is possible, the current learning outcomes are retained as they are important, relevant and will not lead to major changes of existing programmes. The re-profiling of the learning outcomes statements should enable their applications to both academic, professional and TVET/occupation type qualifications.

iv. The Framework should recognize the unique features of the TVET/Skill sector and in particular – curriculum design, learning pathways and industry alignment.
v. The framework should reconsider credit transfers policy and facilitates international comparability qualifications for recognition of Malaysia qualifications.

vi. The MQF and its systems continue to support lifelong learning in various ways. Learners would prefer some form of alternate credentialing certifications – such as micro awards, badges, *nano* qualifications which all can provide individuals with new ways to demonstrate their knowledge and skills.

### 1.6.2 Findings

As a learning organisation, MQA is committed to undertaking periodic reviews of all of its policies, practices, frameworks, standards and guidelines periodically to assess their value to clients, identify shortfalls, manage challenges, and respond to ecosystem changes at both national and global levels. The present review of the MQF has drawn our attention to the following:

i. **Graduate unemployment** has been a fairly constant theme of concern over the last decade. The government, business, industry and knowledgeable citizens have expressed views on the mismatch between curriculum and workplace requirements. Curriculum was deemed to have side-lined issues such requirements of skills at the workplace, critical thinking, language, communication, interpersonal or people skill, industry relevant knowledge and competence.

ii. **The lack of understanding of the MQF**: While some good practices on learning outcomes and assessment was noticeable during programme accreditation and institutional quality assurance audits, there are also evidence of a lack of understanding and an inability to implement the learning outcomes as well as to design effective assessment methods in many cases.

iii. **The requirements of the TVET sector** were especially seen as being side-lined in the framework. Many reports have highlighted insufficient and rigid educational pathways with lack of provision for articulation of educational and career progression, fragmentation in the TVET systems leading to confusion of employers and industry caused by multiple certifications. In addition demand was also made for the Framework to support the different needs of workers as ‘learners’.

iv. **The need for continuous engagement** with the users of higher education was given expression in many circles. Key ‘users’ of qualifications such as employers in industry, business, the community and most of all the learners themselves are
extremely valuable sources of feedback and therefore has to be an integral aspect of continuous improvement.

v. **Comparability with qualifications from other jurisdictions** needs further clarification, especially in the context of the regional movement of labour, goods and services. In a study undertaken jointly with the New Zealand Qualification Agency (NZQA) to compare the outcome descriptors in the two jurisdictions at the Bachelor, Master’s and Doctorate levels, it was found that the MQF descriptors required greater clarity to defend its strength and comparability.

vi. **Integration of basic learning outcomes of different sectors**: An objective of the MQF is to provide an integrated system with the levels, use of same generic learning outcomes (knowledge, skill and attitude), and credits for all type of qualifications by the awarding bodies, in harmony with one another. The issue of parity requires an in depth study as the systems are fundamentally different for various reasons.

### 1.6.3 Recommendations

The recommendations address the following:

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<thead>
<tr>
<th>Recommendations</th>
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<tbody>
<tr>
<td>1. Refining and adopting learning outcomes in MQF version 2.0 (2018)</td>
</tr>
<tr>
<td>2. Advocacy and Socialization of MQF to learners, employers and community (2017-2020)</td>
</tr>
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<td>3. Improving the quality assurance practices (2017 on going)</td>
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<td>4. Conduct in depth study to address issue of parity of esteem and TVET pathways (2017-2018)</td>
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<td>5. Internationalization/benchmarking of MQF (2017-2020)</td>
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### 1.7 Moving Forward

The report recommends no structural changes but to address its objectives, clarifies the levels, the learning outcomes and level descriptors, and credits in the light of new policy goals and external development and areas of concern raised in various studies and reports.

Within Phase 2 of the MQF, in the next 5 years, it is vital that there should be stronger efforts to involve industry and employers the experience and practice will set a strong cultures of good
practices and significant internalization of MQF into the whole institutional systems in effective and meaningful curriculum design and delivery, training and community engagement; to inculcate a strong culture of OBE good practices and significant institutionalization of MQF; and to co-create and produce the individuals-graduates-citizens as aspired by the nation and for current and future jobs.
SECTION 2
Malaysian Qualifications Framework Version 2.0

2.1 Statutory Objectives of Malaysian Qualifications Framework

The Malaysian Qualifications Agency (MQA) derives its powers from an Act of Parliament (Act 679) which gives it powers to propose, advise, guides, administer and regulated the higher education and training sector with specific reference to quality assurance. The main protocol mandated is to implement the Malaysian Qualifications Framework (MQF). “The Agency shall be responsible for the implementation of the MQF consisting of qualifications, programmes and higher education providers based on a set of criteria and standards, including learning outcomes achieved and credits based on students’ academic load.”

To conduct its business as mandated by law, MQA has designed a number of instruments, protocols and guidelines. The Framework may be reviewed and amended from time to time and to consult, collaborate, and coordinate with a broad range of stakeholders as well as the professional bodies. These changes must be approved by the MQA Council and subjected to the approval of the Minister responsible.

To recap the objectives of Malaysian Qualifications Framework

The objectives of the MQF set by the Malaysian Qualifications Agency Act 2007 36 as follows:

a. to secure standards of qualifications and reinforce policies on quality assurance
b. to promote the accuracy or consistency of nomenclature of qualifications
c. to provide mechanisms for the progression or interrelation between qualifications, including non-degree and degree qualifications
d. to encourage collaboration between public and private sector higher education providers and skills training providers
e. to encourage parity of esteem among academic, professional, technical vocational and skill training providers
f. to establish a credit system to facilitate credit accumulation and transfer which is acceptable within and outside Malaysia
g. to provide clear and accessible public information on programmes or qualifications in higher education
h. to promote where applicable, the presentation of qualifications in forms that facilitate their evaluation by any person, including government agencies, higher education providers, students, academic staff, quality assurance and accreditation bodies, professional bodies, examination bodies and employers; and

i. to articulate links with qualifications from outside Malaysia

2.2 Definition Malaysian Qualifications Framework Version 2.0

“It is an instrument that develops and classifies qualifications based on a set of criteria that is nationally agreed, and benchmarked with international practices and which clarifies the academic levels learning outcomes and credit system, based on student academic load.”

This framework also the level of learning achievement of learners in related academic and vocational fields, enables qualifications to be integrated and linked to all qualifications thereby improves the transparency, support lifelong learning through various flexible learning and pathways, and at the same time strengthens their international recognition.

2.3 Key Features

The MQF has been an overarching framework for qualifications from different sectors. The existing features of MQF such as the levels, credits are being retained, whilst the learning outcomes domains were revisited. The key features are as follows:

a. It is a unified and comprehensive nature within the higher education (HE) and TVET sectors.

b. It maintains the eight (8) levels of learning and recognizes that certain levels such as six (6) and seven (7) (Bachelor and Masters) are able to accommodate programmes with differences in the learning structure, model and credits, provided it best fit in these levels.

c. The generic learning outcomes domains are applicable to academic/HE and TVET/work sectors.

d. Qualifications from different sectors at a certain level are not expected to be identical but must display comparable learning complexities for parity of esteem.

e. It maintains a credit system which determines the load required as determined for each level, and the related transfer/exemption policies.
f. It provides learning pathways and supports lifelong learning through clear linkages between qualifications and levels and continues to seek improvement to available pathways.

g. It continues to support initiatives toward widening access and progression in lifelong learning with various approaches.

h. It continues to support mobility of learners, portability of qualifications and credits, international comparability and recognition of Malaysian qualifications.

i. It is entrenched within the quality assurance and accreditation system to oversee/ensure its effective implementation with the programmes and education management systems of institutions, focusing on learners for trust, confidence and recognition.

j. It continues to remain a dynamic instrument that develops according to priority and national changes by providing the context and instrument for changes and improvement in the higher education and training systems.

2.4 Scope of Framework and Sectors

The Framework is about post-secondary qualifications within the HE and TVET sectors that are segments of post-secondary educations. a. The awarding bodies are mainly HEPs, public and private, and TVET institutions include the polytechnics, community colleges, vocational colleges and skills training organisations. The skills training institutions are regulated under NASDA Act 2006 while the others are governed by the Education Act, 1996 and PHEIs Act 1996. There are also other awarding sectors such as MARA and State Skills Development Centres. Skills certification and qualifications is considered components the TVET sector.

In 2015, UNESCO has redefined TVET as ‘comprising of education and training and skills development relating to a wide range of occupational fields, production, services and livelihood. TVET as part of lifelong learning can take place at secondary, post-secondary, tertiary and includes work based learning and continuing training and professional development that may lead to a qualification. It includes a wide range of skill development at national and local context. It needs to consider literacy, numeracy skill, transversal skills and citizen skills which form the integral part of TVET’.

TVET type qualifications generally contain these elements:

i. Knowledge which are general and specialized; work, industry and core skills/abilities;
ii. foundational academic skill such as reading proficiency, oral communication, written communication, critical thinking, analytical thinking problem solving among others;

iii. relate to work, occupations/employment and industry skills/competency standards;

iv. with more than 40% practical components (requirement by MOHE).

Level 1 to 5 gives special focus to TVET/work-type qualifications. Learners from TVET may proceed to higher qualifications in the universities in normally relevant applied based programmes. The school based qualifications are considered as entry qualifications and they may equate to Level 3 and 4 and this is subject to further verifications.

2.5 Qualifications

The Qualifications conferred are certificates, diplomas or degrees which are awarded by a HEP or any party that is authorized to confer or to award the qualification, having affirmed that one has been successful in completing the study at the determined standard, has satisfied the determined levels of achievement and is capable to take a role, duty or work. Qualifications indicate positive achievement of learning outcomes as per programme requirement. The award of honorary degrees such as honorary doctorate should be distinguished from the doctoral degrees in the MQF.

It is also likely that, in response to consumers demand, alternate credentialing such as micro-credentials, badges, etc. will become a part and parcel of the qualifications Malaysians institutions may confer, in the context of lifelong learning. These forms of learning achievements should be quality assured.

2.6 Levels of Qualifications

Each level in MQF is provided with generic statements which describes the learning achievement at a particular level.

The MQF version 2.0 maintains eight levels of learning achievement as currently practiced and comparable to regional frameworks. Certificates are at Level 1-3, Diploma and Advanced Diploma at Level 4-5 and Degrees at Level 6, 7 and 8 for Bachelor, Masters and Doctoral qualifications)

The levels are read together with the levels descriptors which broadly characterize the learning achievement and set the assessment standards at each level.
The vertical progression normally sets the base level knowledge and skill. It tends to reflect accumulation of knowledge and skill from each level progressively. A horizontal reading of a level informs the level’s requirement across the set of learning outcomes required in a programme.

In an assessment of equivalency of a qualification, the learning outcomes and level descriptors are important factors.

The learning outcomes are stated in the levelling and are distinguished in terms of:

i. the depth, complexity and comprehension of knowledge;
ii. the application of knowledge and skills;
iii. the scope communication/interpersonal skills, Information and Technologies skills and numeracy skills;
iv. the degree of autonomy and responsibility;
v. the breadth and sophistication of practices; and
vi. scope and complexity of application.

2.7 Purpose of Level Descriptors

Each level in MQF is provided with a generic statement which describes the learning achievement at a particular level. The purposes of the levels descriptors are to:

i. guide writing learning outcomes of programmes, supports assessment criteria, as well as guide the assigning levels to programmes and qualification against the Framework,
ii. provide common and shared understanding of the qualifications and assists broad comparison of qualifications of various fields as well in equivalency assessment of foreign qualifications.
iii. provide one set of generic level descriptors which are applicable to the variety of different learning contexts such as academic, professional, technical and work. It also applicable to variety of learning settings such as conventional classroom to work-based learning, apprenticeship, field work, and industrial attachment, practice-based, clinical and so forth.
iv. define level descriptors which are generic and overarching, and are intended to fit academic and vocational qualifications at a given level regardless of the subject area. It is within the specific programme design that the descriptors are contextualized, influenced by the specific subject or discipline, technical and vocational and by
professional fields. (e.g. Programme Standards, and/or standards for professional programmes).

v. act as a reference point in assessment of prior experiential learning for advance standing.

vi. the level descriptors are broad guidelines and non-prescriptive of learning standards.

vii. Provides for each level descriptions, the expected capabilities/competencies of learners on successful completion of the learning programmes in the context of work and study environment.

2.8 Learning Outcomes

Learning outcomes are ‘statements on what students should know, understand and can do upon successful completion of a period of study, which generally leads to a qualification or part of a qualification. This shifts the focus of educational processes from teacher centred to learner centred education.

The levels, domains of specific learning outcomes and credits are external standards and guide the inputs by institutions into the curriculum, teaching, learning and assessment. The generic outcomes are intended to provide a framework to close the gap between the world of education and work and using generic learning outcomes to further integrate the systems.

Although the learning outcomes are defined individually and seen as probably separate components in a programme of learning, the approach to teaching-learning and assessment supports the growth of wider and a continuous development of competencies—explore for more knowledge and understanding, better cognitive skills, new work and personal skills and personal development. The broader expectation is that the learners are expected to be able to continue to perform and improve these competencies in their working life and further education.

2.8.1 Scope of the Domains of Malaysian Qualifications Framework version 2.0

The MQF version 1.0 already set the eight (8) learning outcomes which still remain relevant and universally comparable and therefore retained in MQF version 2.0. It correlates largely with the aspirations of the National Education Philosophy (1961) and
with Malaysia Education Blueprint 2015-2025 (Higher Education)\(^6\) which sets the attributes of future graduates (21\(^{st}\) Century Skills) and benchmarked against the ASEAN Reference Qualifications Framework (AQRF) and other qualifications frameworks such as AQF, NZQF, NQF of South Africa, European Qualifications Framework, Scottish Credit and Qualifications Framework as well as several Asian nations’ national qualifications frameworks. Table 2 rationalises the selection of Learning Outcomes domains.

Regional Frameworks reflect may be brief and generic while national framework provides more information and sectorial fairly detailed. The AQRF focuses on applied competencies which include cognitive, functional, personal and ethical competencies and define learning outcomes into 2 types: Knowledge/skill and application /responsibility and while personal and ethical skills are to be determined by the countries. There are broad domains or areas or sometimes known as dimensions. The presentation format also differs.

**Table 2: Rationalizing the Learning Outcomes**

<table>
<thead>
<tr>
<th>AQRF</th>
<th>Ethical competence</th>
<th>Personal competence</th>
<th>Functional competence/Skill</th>
<th>Cognitive competence</th>
</tr>
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<td>Ethics Spirituality</td>
<td>Leadership skills</td>
<td>National Identity</td>
<td>Thinking skills</td>
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<td>2015-2025</td>
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<tr>
<td>MQF version 1.0</td>
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<td>leadership skills team, and management lifelong learning skills</td>
<td>problem solving and scientific skills</td>
<td>knowledge</td>
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<td></td>
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<td>practical skills</td>
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<td>Knowledge comprehension</td>
<td>Knowledge</td>
<td>Skills cognitive skills work skills</td>
<td>ICT/Digital technology skills/ Communication/ interpersonal skills Numeracy Skills Entrepreneurship</td>
<td>Application context, Autonomy and responsibility Leadership Team skill</td>
<td>Personal development, Personal values management- lifelong learning, career and educational growth Ethics and social responsibility Work ethics, Professional ethics, practices, professionalism Social responsibilities</td>
</tr>
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</table>

### 2.8.2 Summary of Learning Outcomes in Malaysian Qualifications Framework Version 2.0

These learning outcomes must be perceived in a holistic manner as they develop into wider competencies beyond the specific outcomes in due course, whilst many are cross-critical outcomes. The MQF version 2.0 learning outcomes are redesigned/re-profiled to provide clarity in differentiating the demands of learning by each level, and within the context of study or work/professional context and situations. The clustered domains are:

- i. knowledge and understanding
- ii. practical/work skills
- iii. interpersonal/communication, ICT and numeracy skills/entrepreneurial skills
- iv. leadership, autonomy and responsibility
- v. personal skills and ethical skills.

As a general practice, the specific content selection-specific knowledge and other related fields and cognitive skills, must be identified in the specific programme while the other generic skills which are general capabilities that all student should develop in the course of study and training, whether by specialised courses or integrated in the teaching and learning strategies including WBL and even co-curricular activities.
2.8.2.1 Brief description of learning outcomes

i. **Knowledge and comprehension or the cognitive domain (Ilmu)**

Knowledge and comprehension/understanding refers to a systematic understanding of facts, ideas, information, principles, concepts, theories, technical knowledge, numeracy, practical tools, processes and systems (or defined as declarative, procedural, causative and contextual knowledge).

It relates to a subject of field of study or discipline, or technical field and work related. It starts with basic general knowledge and progress to varied, broader, advanced, specialized and so forth. In TVET field technical-vocational specialised knowledge, sustainable practices, rules and regulations, health, safety and environment are considered part of the scope of knowledge.

The scope of knowledge should include the common everyday knowledge within the learners’ environment. It may be acquired through formal, informal, and non-formal circumstances-experiences. Numeracy knowledge is part of a scheme of studies whilst entrepreneurship mind-set and skill is a combination of relevant knowledge, intellectual skills business skills, interpersonal skills and personal attributes.

Knowledge and understanding enable the learners to relate to their prior knowledge and in the course of learning or work. Knowledge provides the basis for applications of all other learning outcomes.

ii. **Application of knowledge and skill (Kemahiran)**

Skill refers to ability apply knowledge in context. This cluster includes a range of skills such acquisition and application of cognitive skills, practical work skills, specialized technical/operational skills or occupational related skills and practices. This includes capabilities in selection of tools, methods, procedures, planning and capacity to work or execute tasks. Competent to perform a skill may be related to study, tasks, work and practice it is situational and contextualised.

iii. **Cognitive skills (Intellectual skills)**

These relates to thinking or intellectual capabilities and the ability to apply knowledge and skill. The capacity to develop levels of intellectual skill progressively begins from
understanding, critical/creative thinking assessment, applying, analysing, problem solving and synthesizing to produce new ideas, solutions or new practices. Such intellectual skills enable the learner to search and comprehend new information from different field of knowledge and practices.

iv. Practical skills

These are generally work skills and operational skills applicable in common employment environment such as planning, organizational skills, selection of tools, material, technology methods and procedures; while in study context, it may include study skills and preparations, undertaking procedures, scientific skill, designs, research and so forth.

v. Specialized skills

These skills are set by specific subject, discipline, technical or occupation-related work skills and professional practice which enhance professional work competence. It may include sustainable practices.

vi. Interpersonal skills/Communication, ICT/ Numeracy Skills

**Interpersonal skills** refer to a range of skills which amongst others includes interactive communications, managerial skill and collaborative skill in managing in relationships in teams and within the organisations, people of different cultures, work and social skills/etiquette and professionalism.

**Communication skills** refer generally to the ability to communicate/present information, ideas, reports and in some situation interactively, professionally in appropriate language. The communication must be effective and in an appropriate form to a range of audience and different situations. The ability to communicate in more than one language is encouraged.

**ICT/Digital literacy** skills generally refer to the ability to use IT / digital technologies to support work and studies. The skill of sourcing and storing information, various data/analysis, understanding of its usage, ethics, implications as well using applications for problem solving and communication.
Numeracy skills are generally included in programme design that requires understanding basic mathematics, understanding symbols to statistical techniques. It is acknowledge as this skill is becoming important in study, work and daily live. Within the MQF Levels, this learning outcome may not be specifically provided for the levels and thus the specific programme should indicate this outcome where relevant.

vii. Leadership, autonomy and responsibility

These skills refer to the individual ability to build and work with groups or teams, varying scope of autonomy to make decisions, both in a peer to peer environment or in managerial capacities, set goals organisation/unit/team and take on responsibilities and provide accountability. While it is important to demonstrate leadership and managerial skills, this also demand a person to be confident, knowledgeable, articulate, honest, professional, concerned, risk takers with a higher degree of integrity-intrapersonal skills.

viii. Personal and Ethical skills-attitudes

Personal skill refer to aspects of ability to drive for independent learning, and intellectual development, self-development, confidence, self-control, personal social skills and etiquette, professionalism in work/practice, planning and execute career development or further education plans. It includes character building in such aspects such us honesty, punctuality, time management, keeping to and maintaining deadlines that are important in a work environment.

Ethics and values are important at personal, organisational and societal / community level. Being a responsible member of society is important for personal actions, at work and within the community at large influenced by universal, cultural or religious values. Awareness of ethical, social and cultural issues is important in the exercise of professional skills and responsibilities. At the workplace ethics is mostly about professional integrity and being honest – doing the right thing at the right time at all times. Ethical skills also include embracing professionalism and personal standards of behaviour such as upholding regulations, laws and codes of good practice or code of professional conduct, in their institutional settings. Ethics in an educational settings are also important such – integrity in learning and research.
2.8.3 Application of Learning Outcomes

Learning outcomes are asserted in:

i. levels and translated to level descriptors

ii. fields of study and the levels within. It enables the generic outcomes to be contextualized and relevant to the discipline needs. This can be referred to Programme Standards for various disciplines, as well as standards for specific qualification of the Framework such as Postgraduate Qualifications.

iii. programmes developed by HEPs must comply with the MQF. This is ensured through the programme design- programme objectives, programme and course learning outcomes, assessments of such outcomes are reflected in the courses, units or modules that formed the programme and leads to the qualification title. The COPPA guides the design of the programmes.

iv. programmes which emphasize on the attainment of the outcomes and not on only on how they are achieved. Therefore the methods of achieving are not limited to formal education but includes learning acquired through non formal and information processes and experiences. They are subjected to assessment or Accreditation of Prior Experiential learning, in order to be used to progress to higher level of study or training.

2.9 Qualification Title / Nomenclature

The MQF set a single qualification title for each qualification e.g. Level 4 qualifications carries a Diploma regardless with sector it originates provides it fulfils the qualifications standards determined for Level 4. In the case of Master's qualifications, due to the type of learning modalities, the award bearing the Masters award title will also indicate Masters by research, Masters by mixed mode, Masters by coursework and Specialist Masters peculiar to the field of Medicine.

Generally Certificate and Diploma will indicate one field of study/discipline only, without any specialisation.

In the case of Bachelor programmes, the award may use the designated field as a qualifier and it indicate a specialised programme as the name indicates, e.g. Bachelor of Accounting. A programme with specialization is indicated in bracket, e.g. Bachelor of Computer Science
(Programming) if at 25% of the component in in the area of specialisation. For double major programmes that contain fundamental components of two main fields with the percentage of 50-50, the qualification is named using the connector ‘AND’, for example Bachelor of Commerce and Finance. A major-minor programme that contains at least 25% component in other fields of study is named using the connector ‘WITH’, for example Bachelor of Biology with Psychology.

2.10 Credits

Credit system plays an increasingly important role in higher education both at national and international level to measure and enhance student learning, programme transparency, improved institutional effectiveness but also in promoting global mobility of students and workers. Its key importance lies in its ability to quantify and record student-learning achievement.

MQA is required by the MQA Act 2007 under S 35 (f) for MQA to establish a credit system to facilitate credit accumulation and transfer which is acceptable within and outside Malaysia. It has both qualitative and quantitative value overall. MQF is also seen as Credit-Reference Qualifications Framework as mandatory minimum credit accumulation for each level is predetermined. Various policies and requirements to support credit transfer between programmes and between institutions and are apparently used in student mobility arrangements are in place.

Key element on credits –

i. The MQA Act 2007 defines a credit as 'a representative measure to reflect the academic load'. Within the MQF publication 2008, ‘credit is a quantitative measure that represents the volume of learning or academic load to attain the set of learning outcomes.’

ii. In this aspect ‘academic load’ is a quantitative measure of all the learning activities required to achieve a defined set of learning outcome-lectures, tutorial, seminar, practical, clinical practice self-study retrieval of information, studio work, research, fieldwork, work-based learning as well as preparing for and sitting for an examination.

iii. The (national) credit value is 1 credit equivalent to 40 Notional Learning Hours (NLHs). This took into consideration the semester system and assumption of availability of learning hours of average students from F2F, guided, self-learning and non F2F. It varies with other systems.
iv. **Credit accumulation** is a process of achieving credits overtime in relation to a planned programme of study. It is the totalling of relevant credits required to complete a qualification or programme. MQF has determined the minimum mandatory credit accumulation/load for each Level and must be fulfilled to be awarded the qualification. It is also a criteria for comparability of qualifications locally or foreign. The minimum duration for these qualification/programmes has been predetermined by policies.

v. **Credit load** per semester is generally not more than per 20 credits per semester (max 2½ semester per year) unless permission is given for higher credit based on 2 longer semesters (e.g. foundation programme).

vi. **Credit Transfer System (CAT)** is subjected to the policy and framework on CAT to enable learners to accumulate credits and to facilitate the fairer, equitable, efficient and transparency credit transfer-vertically, horizontally and even diagonally between sectors. This is required by the MQA Act 2007. The current practice indicates the maximum credit transfer is 30% except for TVET type programme and pathways.

vii. **Credit exemption allows** a student to be granted on application for credit exemption for a subject/course or module based upon learning achieved, the student is required to take up other subjects/course or module to satisfy the total credit graduating requirements of the Level.

**Table 3** indicates the minimum credit accumulation/load.

**Table 3: Minimum Credit Accumulation/load**

|------------------|------------------|-------------------|-------------|
2.11 Qualifications Profile (please refer to Appendix 1 for Overview of MQF Version 2.0)

The qualifications in the MQF are defined by their purposes, levels, titles, outcomes descriptors and credits. Within a single qualification attached to a level, there may be different awards which denote their modalities and design, particularly at level 6 and 7.

Certificates

There are 3 levels of Certificates for TVET and academic type programmes. Level 1 prepares a person to enter into the system and to progress upwards for study and work. It has 15 credits and does not require an entry qualification except the ability to read, write and calculate/basic arithmetic (3 Rs). Level 2 is allotted 30 credits and Level 3 with 60 credits but with an entry requirement of 18 years old for TVET or minimum SPM 1 credit or equivalent. The progression route is to Level 4 or to seek employment.

Diploma and Advanced Diploma

The diploma is at Level 4 applies to both TVET and higher education with minimum 90 credits following a two years full time study or equivalent. The breadth and depth is wider in terms of knowledge i.e. in one or more area of study/discipline, the learners will develop cognitive skills, acquire varied work skills, develop leadership, collaborative, managerial and interpersonal skill which are critical in a competitive work environment. The scope of learning and skill leads to employment and career development in services sectors, in professional/paraprofessional fields, as well as in the various technical and vocational fields (occupational-related). It also prepares learners to progress to more advanced education – to advanced diploma or a bachelor’s degree.

The entry requirements include normally SPM with 3 credits or as per MOHE’s policy, or equivalent, or a Level 3 Certificate or through Accreditation of Prior Experiential Learning. The Executive Diploma is designed to serve the workforce in more specialized area of study subject to conditions. It allows 30 credits to be recognized from assessed prior work experience.

The Advanced Diploma, with 60 credits is at Level 5. Learners may proceed from Level 4, to acquire more advanced specialized knowledge and skills in a similar or same field of study leading to with better opportunities for higher managerial, technical/vocational or professional field position and responsibilities. It also provides pathways into the bachelor’s programme.
Bachelor

This qualification at Level 6 must fulfill the minimum 120 credits accumulation. It involves broad, comprehensive knowledge, strong intellectual and problems solving skills, various work competences and professional practices, effective interpersonal and communication and research skills, in a specialized or multi/interdisciplinary field of study, leadership and managerial skills to lead, manage and take responsibilities in organisations including within a multicultural or transnational settings. The bachelors in recognized fields also lead to professional practice. All bachelors generally provide the basis to progress to Master’s degree.

Within Level 6, bachelor programmes offered in Malaysia includes the (non-professional) ‘academic’ bachelor, bachelor for professional practice ( requires recognition from professional statutory bodies, and the bachelor with Honours as practiced by some institutions and the international foreign universities branch campuses.

Academic/Non-professional Bachelors

The academic type (non-professional) has a minimum credit accumulation of 120, normally acquired after 3 years of full time study. A programme of 120 credits with similar learning outcomes may be conducted in 4 years or more, e.g. to fulfill the requirement of industry training/work-based learning, or workplace learning or as prescribed by specific fields of study.

Bachelors for Professional Recognition and Practice

A bachelor’s degree is generally the basic qualification required to enter into a regulated occupation or profession. The duration of full time study is normally between 4 to 5 years with STPM or equivalent as the entry requirements. The knowledge and skills required for practice in the various professions reflect the breadth and depth of theoretical and practical components. Normally the standards are determined by the professional statutory bodies in Malaysia. Examples include BEng (4 years), MBBS (5 years), Bachelor in Quantity Survey, Bachelor in Accounting.

Bachelor with Honors

The current practice of awarding ‘Honors’ distinctions in a bachelor award by local higher education institutions is based on the final grades of the students in both the 3 and 4 year programmes. In comparison with other jurisdictions and NQFs, such as Australian Qualifications Framework or the New Zealand Qualifications Framework, the Bachelors with Honors are
placed at a separate high level to the normal bachelor, entails one additional year of study, with higher entry point after a bachelor to recognized advanced and significant research component.

It is recommended that bachelor with honors can be awarded for the additional year, provided that it incorporates a reasonable research component or applies to professional programmes only.

**Graduate Certificate and Graduate Diploma**

At Level 6, there are two forms of qualifications which support lifelong learning and learners is expected to acquire knowledge, skills and competencies at the level of bachelors. The credit requirement for a Graduate Certificate is 39 credits whilst 60 credits for Graduate Diploma.

The two qualifications are available to learners without taking into account of their previous qualification(s) and are dependent on the aims of the qualifications. They are awarded with either a Graduate Certificate or Diploma upon completion of formal education, training, or for recognition of work experience, for professional development, changing a field of training or expertise or practice. It may also allow learners to exit and later return to continue studies and training. These qualifications also allows continuation of studies to a higher level of education and with permissible credit transfer.

**Masters**

Masters qualification is at level 7 of the Framework and typically is an extension of study undertaken at bachelor’s level in similar discipline area, or one or more disciplines or based on extensive professional practice experience. The minimum credits set are 40 and normally it involves between 1 to 2 years of full time study. There several types of Masters programme within this Level. The learning outcomes are intended to be inclusive of the types of masters.

A Master’s degree involves in-depth, and in significant advanced specialized knowledge of a specific area of discipline or in inter/multi-disciplinary approach which is current and at the forefront field of knowledge; critical, systematic and creative thinking skills, research practice or advance professional practice; interpersonal skills with leadership and managerial skill working which are critical competencies particularly within a multicultural or transnational work and learning environment. The learners are expected to be able inform, share or advise new solutions, improved innovations, share views on contemporary and new issues in related fields or professional practice in a professional field to relevant audience e.g. in medical clinical
treatment. While the above competencies are expected as outcomes of a masters study, the differences generally is in the output -- in the form of substantial thesis, dissertation, long case study, project report, new technical solutions/practices and art forms.

There are 4 types of Masters programmes placed at Level 7. These qualifications are defined in the Post Graduate Programme Standards as well as in Programme Standards.

i. Masters by Coursework
ii. Masters by Mixed Mode
iii. Masters by Research
iv. Specialist Masters in Medicine (yet to be finalized)

Post Graduate Certificate and Post Graduate Diploma

These two qualifications are considered to support lifelong learning pathways provided by MQF as they enable learners to progress to acquire advance knowledge from a bachelor or equivalent to the Masters Level.

The competencies or outcomes must be at least at the masters levels with major part of the credits from the same level in a related field of study or continuing skills or specialization. The differences between the two post graduate is the credit accumulations.

In the professional fields, qualifications are usually conferred upon successful completion of formal continuing professional education or undertakes advanced training so as to be known or recognized as experts. These qualifications can be used for certifying as a recognized competent practitioners, a credentialing procedure in the practiced fields. These qualifications also enable progression into or to complete a Master’s degree as the credits acquired in the Post Graduate Programmes may be accepted to fulfill the Masters programme.

Doctoral/PhD

This is the highest level of learning in the MQF leading to conferment of a doctorate normally following a master’s degree. The credit requirement in the case of PhD by course work and mixed mode is 80 the duration normally is between 2-3 years. (Refer to Post Graduate Programmes Standards).

It involves substantial and advanced independent research and scholarship in a most advanced area of knowledge and emerging issues, of a specific area of study/ a discipline or multidiscipline, the conduct of original and independent research which reflects mastery of
advanced research skills, contributing substantially new knowledge/innovations/practice in the related field and its emerging issues, in the form of a thesis or advanced coursework and thesis/dissertation in a professional or applied field or art forms. The independent researcher should provide effective leadership in their field of research, sharing ideas, adhere and deal with complex ethical issues, provides advice to a range of audience and continue to contribute towards the social, technological and cultural progress in the academic and professional contexts.

The qualifications titles are in the forms of a PhD for research doctorates, which applied or professional doctorates relate to the titles such as DBA, D Ed Deng or other descriptors relevant to the field concerned.

2.12 Pathways for Individuals and Lifelong Learning
MQF generates various alternatives pathways with points of entry and exit that recognizes the individual achievements. The framework of linked levels, qualification types, credit and outcomes provides the systems which widen access and progression for better life opportunities to individuals by upgrading their qualification and competencies.

There may be circumstances where a bridging programme may be necessary to prepare the individual to undertake higher level programme. The following are the various policies and provisions for lifelong learning:

i. Credit transfer system whether vertically or horizontally and between sectors. This includes the articulation policy and mechanisms for mobility between TVET and higher education sector and vice versa.

ii. ‘Ladderised' system or stackable qualifications for TVET sector from Level 1 to 4 which allows multi-entry and multi-exits.

iii. Provision of flexible and online learning.

iv. Accreditation of prior experiential learning- APEL for Admission and APEL for Credits

v. Graduate Certificate, Graduate Diploma, Advanced Diploma, Postgraduate Certificate and the Postgraduate Diploma foster lifelong learning, training, professional and career development.

Further details are provided in various Guidelines provided by MQA.

2.13 Level Descriptors
Refer to Appendix 2 for Level Outcome Descriptors.
# APPENDIX 1

## Overview of Malaysian Qualifications Framework (MQF) version 2.0

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</tbody>
</table>