CODE OF PRACTICE FOR TITE FOR PROGRAMME ACCREDITATION





Malaysian Qualifications Agency (MQA) Mercu MQA No. 3539, Jalan Teknokrat 7 Cyber 5, 63000 Cyberjaya Selangor Darul Ehsan

Tel +603-8688 1900 Fax +603-8688 1911

Email akreditasi@mqa.gov.my

Website www.mqa.gov.my

© Malaysian Qualifications Agency 2019

All the Agency's publications are available on our website: www.mqa.gov.my

We will increase the quality and delivery of TVET programmes to improve graduates' marketability through an industry-building approach to lead curriculum development... "J"

YB DR. MASZLEE MALIK Minister of Education Malaysia Education Minister's Mandate 2019 14 January 2019

TVET is the future of this country, TVET growth is a must, human development is a must, we must do well... ##

YB M. KULASEGARAN

Minister of Human Resources

Prime Minister's Golden Hand Award 2018

4 October 2018

CONTENTS

Foreword				
Glos	sary		ii	
Abbr	eviati	ons	٧	
List	of Tab	les	vi	
Intro	ductio	on	1	
SEC ⁻ QUA	_	1: QUALITY ASSURANCE PRINCIPLES OF MALA ATIONS FRAMEWORK	YSIAN	
1.0	Purp	ose of Quality Assurance	3	
2.0	Gove	ernance of The Quality Assurance Body	3	
3.0	Quali	ity Assurance Processes	4	
4.0	The I Provi	Relationship between The Quality Assurance Body and TVET ders	5	
AND	TRAII	2: TVET STANDARDS: TECHNICAL AND VOCATIONAL EDUCATI NING (TVET) CRITERIA AND STANDARDS FOR PROGRAMME 'ATION	ON	
1.0	PRO	GRAMME DEVELOPMENT AND DELIVERY	6	
	1.1	Programme Objectives	6	
	1.2	Programme Learning Outcomes	7	
	1.3	Programme Development: Process, Content, Structure and Teaching- Learning Methods	15	
	1.4	Programme Delivery	20	
2.0	ASSI	ESSMENT OF STUDENT LEARNING	21	
	2.1	Competency-Based Assessment	21	
	2.2	The Relationship between Assessment and Learning Outcomes	27	
	2.3	Assessment Methods	27	
	2.4	Management of Student Assessment	28	
3.0	STUE	DENT SELECTION AND SUPPORT SERVICES	29	
	3.1	Student Articulation and Transfer	29	

	3.2 Student Support Services		33	
	3.3 Student Representation and Participation		34	
	3.4	Alumni	35	
4.0	TEAG	CHING STAFF	36	
	4.1	Recruitment and Management	36	
	4.2	Service and Development	38	
5.0	EDU	CATIONAL RESOURCES	40	
	5.1	Physical Facilities	40	
	5.2	Expertise in Education	41	
	5.3	Financial Resources	41	
6.0	PRO	GRAMME MANAGEMENT	42	
	6.1	Governance	42	
	6.2	Programme Leadership	43	
	6.3	Administrative Staff	43	
	6.4	Records Administration	43	
7.0		GRAMME MONITORING, REVIEW AND CONTINUAL QUALITY ROVEMENT	44	
	7.1	Mechanisms for Programme Monitoring, Review and Continual Quality Improvement	44	
SECTION 3: TVET QUALITY ASSURANCE ASSESSMENT PROCESS				
1.0	PRO	GRAMME ACCREDITATION	46	
	1.1	Accreditation Process	46	
	1.2	Submission for Accreditation	48	
	1.3	Parties to The Accreditation Process	50	
	1.4	The Programme Evaluation Process	53	
	1.5	Decisions on the Programme Accreditation	57	
	1.6	Appeal	58	

Appendices:

References	61
Appendix 2: Core Abilities	60
Appendix 1: List of Panel Members	59

Foreword

Rapid progress and changes in Technical and Vocational Education and Training (TVET) have led to diversification in the delivery approaches as well as the quality assurance mechanisms of programmes offered by TVET providers. Thus, harmonisation of Quality Assurance (QA) processes for TVET in Malaysia is necessary and timely.

The effort to harmonise and unify the diverse QA systems into a single QA system was initiated with the review of the Malaysian Qualifications Framework (MQF), in which skills sector and vocational and technical sector were merged into the TVET sector. This Document, the Code of Practice for TVET Programme Accreditation (COPTPA) was outlined to operationalise the single QA system for the TVET programme. Furthermore, for the TVET sector to be in line with the academic sector, the COPTPA was developed in reference to the Code of Practice for Programme Accreditation (COPPA), which is primarily used for the accreditation purpose of academic programmes and certain TVET programmes.

The COPTPA was developed with the collaboration of Malaysian Qualifications Agency (MQA), Ministry of Education, and Department of Skills Development (DSD), Ministry of Human Resources, taking into consideration the seven Malaysian QA areas and distinguished requirements of each type of the TVET programmes. This Document was developed in consultation with all categories of MQA and DSD stakeholders, comprising policymakers from the related ministries, higher education providers, training providers, panel of assessors, industry representatives as well as MQA and DSD officers.

The Document will be implemented by higher education providers and training providers as standards and guidelines in offering TVET programmes in Malaysia. MQA and DSD officers and the panel of assessors, on the other hand, make reference to this Document in evaluating accreditation applications.

We wish to extend our sincere appreciation and gratitude to the panel committee and all parties that contribute towards the development of the COPTPA. It is our hope that the COPTPA will be the main reference for TVET programme accreditation and continue to serve our mutual interest in assuring the quality of TVET programmes.

Thank you.

Dato' Dr. Rahmah Binti Mohamed Chief Executive Officer Malaysian Qualifications Agency (MQA) Tuan Haji Zaihan Bin Shukri Director General Department of Skills Development (DSD)

Glossary

No.	Terms	Description
1.	Certification of Teaching Competency	A recognition of one's ability in performing/ demonstrating required teaching skills for a subject matter.
		Examples are Vocational Training Operation (VTO), Kursus Pegawai Latihan Vokasional, Sijil Latihan Mengajar TM 001, IPG, Ikhtisas and Sijil Perguruan KPLI.
2.	Competency	The quality of being adequately or well qualified physically and intellectually.
3.	Core Abilities/ Social Skills and Social Values	Essential workplace skills or broad common abilities that cut across occupational and academic titles. They are broader skills that run through courses and are cross-functional to many disciplines and occupations. They enable learners to perform competencies and are learning tools supporting the National Occupational Skills Standards (NOSS) requirements.
4.	Final Project	A compulsory task requiring considerable or concerted effort as a supplement to classroom lessons that contributes to the final grading of the programme.
5.	Industrial Experience	The experience that a person gains working in or attached to a specific industry.
6.	Industrial Exposure	A student's experience in an organisation through field visits in the industry that is appropriate to their field. This exercise does not carry any credit values.

No.	Terms	Description
7.	Industrial Training	A period of time within the programme when students are placed conventionally in the industry to experience the real work environment and enhance soft skills. The term 'Industrial Training' is used interchangeably with Internship and Industrial Attachment.
8.	Mata Pelajaran Pengajian Umum (MPU)	A set of subjects offered at undergraduate educational programmes which aims at providing students with knowledge in preparation for life in modern society. It comprises the understanding of noble values, history and responsibility in society, mastery of soft skills and expansion of Malaysia-based knowledge.
9.	Occupational/Industry Standards	Standards which are certified, recognised and endorsed by MQA and DSD to be used as a benchmark in determining an individual's performance in a specific field/discipline. The Standards underline the expectation of achievement and the amount of knowledge and skills required to perform effectively as described by the industry. The National Occupational Skills Standards (NOSS) is one of the recognised Occupational/Industry Standards. Performance that a person is expected to achieve in his/her work and the knowledge
		and skills they need to perform effectively as described by the industry.
10.	Open and Distance Learning (ODL)	The provision of flexible educational opportunities in terms of access and multiple modes of knowledge acquisition.

No.	Terms	Description
11.	Practical	An act of demonstrating real action to show what a person has learned.
12.	Summative Assessment	The goal of summative assessment or high-stakes examination is to measure the level of success, performance quality, or proficiency as well as how well a student/course/module/programme has achieved the learning outcomes at the end of an instructional unit or a course/module/programme by comparing it against some standard or benchmark. The purpose is to make a judgement by assigning a grade to the student and to make a decision on the future of the student/course/module/programme.
13	TVET Project	Products produced by students who demonstrate a variety of skills and knowledge acquired during their studies.
14	TVET Provider	A body corporate, organisation or other body of persons which conducts higher education or training programmes including skills training programmes leading to the award of a higher education qualification.
15	TVET Provider's Module	A unit of education or training which can be completed on its own or as part of a course and which is considered as a component that makes up a competency for a given discipline or profession. The module is an aggregation of the awareness, knowledge, skills and attitude competencies which reflect what a competent person in a particular role should be able to perform. Modules may also result in the attainment of one or more units of competency.

Abbreviations

1.	3R	Reading, Writing, and Arithmetic
2.	COPPA	Code of Practice for Programme Accreditation
3.	DKM	Malaysian Skills Diploma
4.	DLKM	Malaysian Skills Advanced Diploma
5.	DSD	Department of Skills Development
6.	DVM	Malaysian Vocational Diploma
7.	ICT	Information and Communication Technology
8.	JKT	Technical Committee
9.	JTC	Joint Technical Committee
10.	MJA	Accreditation Committee Meeting
11.	MOE	Ministry of Education Malaysia
12.	MOHR	Ministry of Human Resources
13.	MPU	Mata Pelajaran Pengajian Umum
14.	MQA	Malaysian Qualifications Agency
15.	MQF	Malaysian Qualifications Framework
16.	MQR	Malaysian Qualifications Register
17.	NOSS	National Occupational Skills Standards
18.	ODL	Open and Distance Learning
19.	POA	Panel of Assessors
20.	QA	Quality Assurance
21.	RPL	Recognition of Prior Learning
22.	SKM	Malaysian Skills Certificate
23.	SVM	Malaysian Vocational Certificate
24.	TVET	Technical and Vocational Education and Training

List of Tables

- 1. Table 1: TVET Profile for Malaysian Skills Certification System
- 2. Table 2: Curriculum Structure
- 3. Table 3: Suggested Assessment Methods
- 4. Table 4: Qualification Requirements
- 5. Table 5: Typical Activities Prior to the Evaluation Visit
- 6. Table 6: Typical Activities during Site Visit
- 7. Table 7: Typical Activities for Post-Evaluation Visit

Introduction

The Eleventh Malaysia Plan 2016–2020 projected that 60% of jobs will require TVET-related skills. It is evident that TVET will serve as the most important avenue towards increasing the supply of human capital competencies for the country's economic growth. Hence, the government has strategically channelled its planning towards producing quality TVET graduates in line with the aspiration of the Malaysia Education Blueprint 2015–2025 (Higher Education).

The Ministry of Education Malaysia (MOE) through MQA takes the responsibility to strengthen the TVET sector to be in parity with the academic sector. With the review of the MQF, skills and vocational sectors have been merged into one TVET sector. Hence, the MQF consists of academic and TVET sectors only. The MQF outlines the same competencies and learning outcomes for both sectors' qualification descriptors. The difference will be in the delivery of the programmes.

Another initiative introduced by the government is to develop a single quality assurance system for TVET. This objective has been accomplished through collaborative efforts between MQA and the Department of Skills Development, Ministry of Human Resources (DSD, MOHR). MQA and DSD have been seriously looking into harmonising the quality assurance processes between the two agencies. This resulted in the development of this Document as a reference for quality assurance practices for TVET programmes.

In developing this TVET Standards, the Committee makes reference to the latest definition of TVET by UNESCO in 2015, which redefined TVET as:

comprising education, 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 and tertiary levels and includes work-based learning and continuing training and professional development which may lead to qualifications. TVET also includes a wide range of skill development opportunities attuned to national and local contexts. Learning to learn, the development of literacy and numeracy skills, transversal skills and citizen skills are integral components of TVET.

The key attributes of TVET thus can be summarised as inclusive of education and training processes, comprehensive shaping of talent, and crossing all occupational fields.

This Document defines TVET as an education and training process that has **occupational direction with a major emphasis on industry practices**. It aims to produce competent

workforce in related fields for the achievement of socio and economic objectives of the country.

Based on the above definition, the **scope of TVET should**:

- 1. be based on recognised occupational/industry standards;
- 2. contain 60% 70% practical component;
- 3. emphasise on psychomotor skills;
- 4. include industrial exposure (Level 1–2, MQF);
- 5. include industrial training component (Level 3–5, MQF); and
- 6. include TVET project(s).

Learning outcomes become the core of TVET Standards as they are detailed statements describing in explicit terms of what learners/trainees can perform at the end of the learning or training processes. The learning outcomes domains of MQF 2.0 comprises five main clusters:

- 1. Knowledge and Understanding;
- 2. Cognitive Skills;
- 3. Functional Work Skills with a focus on practical skills, interpersonal skills, communication skills, digital skills, numeracy skills, and leadership, autonomy and responsibility;
- 4. Personal and Entrepreneurial Skills; and
- 5. Ethics and Professionalism.

The scope of TVET Standards covers qualifications from **Level 1 to Level 5 of the MQF**. All programmes across all disciplines under the TVET sector will be required to comply with the seven areas of the standard. Programme developers, providers, assessors and employers will find the standards very useful as a guideline in their respective areas of responsibilities.

The **seven areas** of the TVET Standards include:

- 1. Programme Development and Delivery;
- 2. Assessment of Students' Learning;
- 3. Student Selection and Support Services;
- 4. Teaching Staff;
- 5. Educational Resources;
- 6. Programme Management; and
- 7. Programme Monitoring, Review and Continual Quality Improvement.

Section 1

Quality Assurance Principles of Malaysian Qualifications Framework

1.0 Purpose of Quality Assurance

1.1. Quality assurance is carried out primarily to support the national agenda on lifelong learning, social development and economic advancement.

2.0 Governance of The Quality Assurance Body

- 2.1 A body implementing quality assurance is an organisation that has the mandate to carry out this function through a written law passed by the Parliament.
- 2.2 A Quality Assurance Body must have a clear mission in carrying out its quality assurance function that is supported by an established strategic plan and action. Its organisational structure and management system must demonstrate a high level of accountability. Its quality assurance system and standards are formulated with the involvement of stakeholders which include, among others, academia and industries. The system and standards are implemented in a consistent, fair, efficient, transparent and reliable manner. It ensures its quality assurance decision is made independently without outside influence and interference.
- 2.3 A Quality Assurance Body must have sufficient resources, particularly its human resources, expertise and financial support to effectively implement its quality assurance function.
- 2.4 A Quality Assurance Body must have a system to continuously review and improve the effectiveness of its quality assurance activities. This system includes the involvement of other parties as appropriate.
- 2.5 A Quality Assurance Body must have mechanisms for reporting the implementation of its quality assurance activities which can be accessed by

- the public. These include reporting of any revision of policies, regulations, standards and quality assurance procedures.
- 2.6 A Quality Assurance Body collaborates with other competent bodies to effectively implement its quality assurance activities.

3.0 Quality Assurance Processes

- 3.1. The implementation of quality assurance shall be based on the Malaysian Qualifications Framework.
- 3.2. The objectives and standards established for the purpose of quality assurance should be clear, measurable and achievable.
- 3.3. The quality assurance processes and procedures are developed with the involvement of relevant stakeholders.
- 3.4. The implementation of quality assurance should cover comprehensively various aspects of input, process and output in learning, with emphasis on the quality of learning outcomes and competencies.
- 3.5. The quality assurance approach comprises self-assessment by the internal system of TVET Providers and external verification by the Quality Assurance Body.
- 3.6. The implementation of quality assurance emphasises continuous quality improvement and sustainable quality culture of TVET Providers.
- 3.7. Internal quality assurance is a key component in the management of TVET Providers.
- 3.8. The quality assurance process is carried out by competent reviewers who are appointed based on a clear set of criteria and free from any conflict of interest.
- 3.9. The Quality Assurance Body implements periodic assessments and continuous monitoring of TVET Providers or programmes.
- 3.10. The Quality Assurance Body applies appropriate mechanisms to ensure that the outcomes of quality assessments are publicly accessible.

3.11. The Quality Assurance Body provides clear and transparent mechanisms for complaints and appeals.

4.0 The Relationship between The Quality Assurance Body and TVET Providers

- 4.1 Quality assurance learning is primarily the responsibility of each and every TVET Provider while the Quality Assurance Body shall function as the external verifier.
- 4.2 The role of the Quality Assurance Body, to a certain extent, is to facilitate the quality enhancement of TVET Providers and the programmes they offer for the purpose of meeting the needs of stakeholders.
- 4.3 The quality assurance system and its standards are developed in consultation with TVET Providers.

Section 2

TVET Standards: Technical and Vocational Education and Training (TVET) Criteria and Standards for Programme Accreditation

1.0 PROGRAMME DEVELOPMENT AND DELIVERY

1.1 Programme Objectives

A programme's objectives and learning outcomes reflect what it intends the learner to achieve. It is crucial for these objectives and learning outcomes to be expressed explicitly and made known to learners and other stakeholders alike.

Objectives are described in broad and general statements of learning and teaching indication, encapsulating the general contents and direction of a programme.

A clear and appropriate statement of objectives forms an important element in programme design and quality assurance, and it focuses on student learning experiences. An appropriate formulation of objectives enables a clear understanding of what the programme intends to achieve.

The programme objectives must be consistent with and supportive of the vision, mission and goals of the TVET Provider. Following are the suggested TVET programme objectives for each level:

Level	Objectives
1	To provide learners with simple basic knowledge and understanding, and basic skills to carry out simple, highly routine and repetitive tasks for work and/or study.
	(Basic 3Rs and literacy)

Level	Objectives
2	To provide learners with introductory knowledge, basic skills and competencies to progress in their studies and/or work.
3	To provide learners with fundamental , theoretical and/or technical/operational knowledge, skills and attitudes as well as entrepreneurial skills for further study and/or work.
4	To provide learners with broad knowledge, technical and/or non-technical skills relevant to an area of study and/or work with moderate autonomy and responsibilities, with some level of creativity and management skills subject to broad guidance and direction.
5	To provide learners with advanced knowledge as well as cognitive, practical, technical and/or professional skills, with greater autonomy and higher responsibilities in managing one or more specialised area of study or work.

1.2 Programme Learning Outcomes

Learning outcomes are detailed statements describing in explicit terms of learners' achievements, and they are to be assessed upon completion of a period of study.

The quality of a programme is ultimately assessed by the ability of the learners to carry out their expected roles and responsibilities in society. This requires the programme to have a clear statement of the learning outcomes to be achieved by the learner.

The programme must define the competencies that the student should demonstrate on the completion of the programme that cover the mastery of a body of knowledge; functional/practical or work competency skills; personal competency; and ethical and social responsibility skills. These learning outcomes should also cumulatively reflect the five domains of learning outcomes, which are significant for Malaysia.

1.2.1 The programme must be consistent with and supportive of the vision, mission and goals of the TVET Provider.

- 1.2.2 The programme must be considered only after a need assessment has indicated that there is a need for the programme to be offered. TVET Providers must have a formal committee system responsible for internal and external consultation, feedback, market and occupational needs analysis and employability projections of the programme in line with the new, emerging areas of technology of the programme.
- 1.2.3 The programme must define its TVET objectives, learning outcomes and deliveries including teaching and learning strategies, assessments, and the constructive alignment between them.
- 1.2.4 The programme learning outcomes must correspond to MQF level descriptors and MQF five clusters of learning outcomes:
 - i. Knowledge and Understanding;
 - ii. Cognitive Skills;
 - iii. Functional Work Skills with a focus on:
 - a. Practical Skills
 - b. Interpersonal Skills
 - c. Communication Skills
 - d. Digital Skills
 - e. Numeracy Skills
 - f. Leadership, Autonomy and Responsibility
 - iv. Personal and Entrepreneurial Skills; and
 - v. Ethics and Professionalism.

Following are the proposed TVET learning outcomes for each level:

Domains	Learning Outcomes for <u>Level 1</u>
Knowledge and Understanding	Demonstrate an understanding of simple, factual and basic knowledge within a narrow range of knowledge to address routine and predictable tasks and work.
Cognitive Skills	Apply knowledge in well-defined, highly routine and predictable tasks.

Domains	Learning Outcomes for <u>Level 1</u>
Functional Work Skills with a focus on: a. Practical Skills	Demonstrate basic practical skills using a variety of common tools and materials for very well-defined tasks and systems.
 b. Interpersonal Skills c. Communication Skills d. Digital Skills e. Numeracy Skills f. Leadership, 	 Understand and communicate familiar everyday expressions and simple phrases within a limited range of contexts in basic Malay and English.
Autonomy and Responsibility	 Possess basic digital literacy which is adequate to perform a given task(s) under supervision.
	Work under direct supervision in a highly structured and supported context as the nature of work is repetitive and directed.
	Work in a team and interact with others.
Personal and Entrepreneurial Skills	Demonstrate some responsibility for own learning (awareness of the possibility of future learning).
	Demonstrate the ability to reflect the task(s) undertaken (with some guidance).
Ethics and Professionalism	Be a responsible member of the society (able to demonstrate general rules of behaviour and responsibility in familiar social and health, safety and environment contexts).

Domains	Learning Outcomes for <u>Level 2</u>
Knowledge and Understanding	Demonstrate fundamental understanding within a significant range of knowledge to address
January 5	varied and non-routine tasks/work.

Domains	Learning Outcomes for <u>Level 2</u>
Cognitive Skills	Apply familiar known solutions to solve predictable problems in well-defined routine tasks. - Apply familiar known solutions to solve predictable problems in well-defined routine tasks.
	 Recognise and solve problems in a highly familiar and well-defined context under supervision.
Functional Work Skills with a focus on: a. Practical Skills b. Interpersonal Skills c. Communication Skills	 Communicate within a limited range of contexts, simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters in basic Malay and English language.
d. Digital Skills e. Numeracy Skills f. Leadership, Autonomy and Responsibility	 Possess basic digital literacy which is adequate to perform a given task(s) under supervision.
	 Work with limited autonomy under substantial support and general supervision in a structured activity.
	Work in a team and exchange views and feedback with others.
	 Undertake responsibility and autonomy in performance.
Personal and Entrepreneurial Skills	Demonstrate some responsibility for learning.
	 Reflect and assess work and personal actions (for future improvement).
Ethics and Professionalism	Be a responsible member of society (able to demonstrate general rules of behaviour and

Domains	Learning Outcomes for <u>Level 2</u>	
	responsibility in familiar social and health, safety and environment contexts).	

Domains	Learning Outcomes for <u>Level 3</u>	
Knowledge and Understanding	Demonstrate an understanding of basic principles and theories within a broad range of knowledge to address varied, complex and non-routine tasks/work.	
Cognitive Skills	Operate and/or select basic methods, tools, technologies, material and information to address well-defined and some non-routine problems within an area of work and/or study with supervision.	
Functional Work Skills with a focus on: a. Practical Skills b. Interpersonal Skills c. Communication Skills d. Digital Skills e. Numeracy Skills f. Leadership, Autonomy and Responsibility	 Communicate effectively and cogently, orally or in writing, ideas, information, problems and solutions individually or as a team to peers, experts and non-experts (range of audience) in Malay and English. Use basic digital technology applications to support study or work (IT skills). Take responsibility for, and reflect, self-performance for the scope of activity. Considerable responsibility, autonomy and control or guidance/supervision of others are often required within the scope of work and study. 	
Personal and Entrepreneurial Skills	Study and/or pursue personal development with minimal guidance.	
Ethics and Professionalism	Demonstrate self-reflection of study performance or work taking into account social,	

Domains	Learning Outcomes for <u>Level 3</u>		
	ethical, and health, safety and environment issues.		

Domains	Learning Outcomes for <u>Level 4</u>
Knowledge and Understanding	Demonstrate an understanding of a broad range of complex technical and theoretical knowledge to address well-defined and non-routine tasks/work.
Cognitive Skills	 Identify, interpret, apply and evaluate the general concepts, theories and/or operational principles within the well-defined context of a subject/discipline and/or work. Solve problems in common and well-defined routine and occasional non-routine problems with minimal supervision. Review, make adjustments and supervise related practices and processes concerning the field of specialisation.
Functional Work Skills with a focus on: a. Practical Skills b. Interpersonal Skills c. Communication Skills d. Digital Skills e. Numeracy Skills f. Leadership, Autonomy and Responsibility	 Communicate and interact effectively and clearly, orally or in writing, ideas, information, problems and solutions individually or as a team to peers, experts and non-experts (range of audience) in Malay and English. Demonstrate a substantial degree of personal responsibility and autonomy under broad guidance and direction on well-defined and non-routine study or work activities performed in a wide variety of contexts.

Domains	Learning Outcomes for <u>Level 4</u>			
	Demonstrate supervisory and collaborative skills and responsibility for the work performance of others. (Management and Leadership skills)			
	Possess professional knowledge and practical skills in both technical and management to lead a team in an inexperienced environment. (Advanced/Manager Level)			
Personal and Entrepreneurial Skills	Demonstrate self-evaluation of study or work performance.			
	Demonstrate self-direction for learning and professional/career growth/development of entrepreneurial skills.			
Ethics and Professionalism	Take into account professional, social, ethical, and health, safety and environment issues.			

Domains	Learning Outcomes for <u>Level 5</u>	
Knowledge and Understanding	Demonstrate understanding across a significant range of theoretical, conceptual and technical knowledge within a specialised field to address varied and unpredictable tasks/work. Apply, interpret, analyse, and evaluate detailed technical, conceptual and theoretical knowledge and resolve issues in a broadly defined complex context, routine and nonroutine or unpredictable circumstances.	
Cognitive Skills		

Domains	Learning Outcomes for <u>Level 5</u>			
Functional Work Skills with a focus on: a. Practical Skills b. Interpersonal Skills c. Communication Skills d. Digital Skills e. Numeracy Skills f. Leadership, Autonomy and	 Apply a range of practical skills, essential methods and procedures to a broad range of complex tasks. 			
	 Express oneself fluently and spontaneously without much obvious searching for expressions, and use language flexibly and effectively for social, academic and professional purposes. 			
Responsibility	 Produce clear, well-structured, and detailed texts on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices at the advanced proficiency level of Malay and English. 			
	Demonstrate the ability to incorporate entrepreneurial skills in planning daily activities.			
	 Exercise very substantial degree of autonomy and often significant responsibility in making judgements/ decisions towards the management of self and others and for the allocation of substantial resources. 			
	Possess professional knowledge and practical skills in both technical and management to lead a team in an inexperienced environment. (Advanced/Manager Level)			
Personal and Entrepreneurial Skills	Demonstrate related global competencies.			

Domains	Learning Outcomes for <u>Level 5</u>	
	 Engage in self-directed lifelong learning effectively and demonstrate entrepreneuria skills. 	
Ethics and Professionalism	Demonstrate social, professional environmental and ethical practice/code/values to solve problems.	

1.2.5 Considering the stated learning outcomes, the programme must indicate the career and further studies options available to students on completion of the programme.

1.3 Programme Development: Process, Content, Structure and Teaching-Learning Methods

Curriculum

- 1.3.1 The TVET programme must be considered only if **occupational/industry standards** are used as a basis for curriculum development.
- 1.3.2 The curriculum must fulfil the requirements of particular occupational/industry standards and where applicable, professional and industry requirements as well as good practices in the new, emerging field of technology.

The profile of TVET qualifications through the Malaysian Skills Certification System is described in **Table 1**.

Table 1: TVET Profile for Malaysian Skills Certification System

Qualification / Level	Student Learning Time (Hour) (max 8 hours per day – inclusive of face-to- face, non-face-to-face, self-learning and assessment)	Minimum Credits (1 credit = 40 notional hours)	Normal Duration
Certificate / Level 1	600	15	6 months
Certificate / Level 2	1200	30*	12 months
Certificate / Level 3	2400	60**	24 months (2 years)
Diploma / Level 4	3600	90***	3 years
Advanced Diploma / Level 5	1600	40	1 year

The information in Table 1 describes the implementation of TVET curriculum for the Malaysian Skills Certification System. Industrial training is made compulsory for students enrolled in Certificate Level 3 to Advanced Diploma Level 5 programmes. This will lead to an expansion of the programme's duration as shown below:

- i. Certificate Level 3: 1 year plus 3–6 months of industrial training;
- ii. Diploma Level 4: 1 year plus 6 months of industrial training; and
- Advanced Diploma Level 5: 1 year plus six months of industrial training.

The curriculum for the Malaysian Skills Certification System was designed in such a way that:

* 15 credits may be completed during Certificate Level 1 in the same field;

- ** 30 credits may be completed during Certificate Level 1 and 2 in the same field; and
- *** 60 credits may be completed during Certificate Level 1, 2 and 3 in the same field.

The curriculum structure for TVET qualifications is described in **Table 2**.

Table 2: Curriculum Structure

Qualification / Level	Curriculum Structure	Credits	Percentage (%)
Certificate / Level 1	 Compulsory Modules (Core Abilities/ Social Skills and Values + TVET Provider's modules) Discipline Core Modules (70% of which must be practical oriented including Industrial Exposure) 	1 - 2 13 - 14	7 - 13 87 - 93
	_/.pood.c)	15	100
Certificate / Level 2	 Compulsory Modules (Core Abilities/ Social Skills and Values + TVET Provider's modules) Discipline Core Modules (70% of which must be practical oriented including Industrial Exposure) 	2 - 4 26 - 28	7 - 13 87 - 93
		30	100
Certificate / Level 3	 Compulsory Modules (General Studies [MPU]/ Core Abilities/ Social Skills and Values + TVET Provider's modules) 	6 - 9	10 - 15

Qualification / Level	Curriculum Structure	Credits	Percentage (%)
	Discipline Core Modules (70% of which must be practical oriented)	39 - 48	65 - 80
	3. Industrial Training (3 - 6 months)	6 - 12	10 - 20
		60	100
Diploma / Level 4	 Compulsory Modules (MPU/ Core Abilities/ Social Skills and Values + TVET Provider's modules) Discipline Core Modules (60% of which must be practical oriented including final project) 	9 - 15 63 - 75	10 - 17 70 - 83
	Industrial Training (6 months)	12	13
		90	100
Advanced Diploma / Level 5	Compulsory Modules (MPU/ Core Abilities/ Social Skills and Values + TVET Provider's modules)	8 - 11	20 - 28
	Discipline Core Modules (60% of which must be practical oriented including final project)	17 - 26	43 - 65
	Industrial Training (6 months)	12	30
		40	100

The MPU modules at Certificate Level 3, Diploma Level 4 and Advanced Diploma Level 5 are prescribed by the Ministry of Education Malaysia

(MOE) as follows:

- i. 6 9 credits for Certificate Level 3:
- ii. 8 11 credits for Diploma Level 4; and
- iii. 8 11 credits for Advanced Diploma Level 5.

The modules for Core Abilities as offered in NOSS-based programmes are prescribed by the Ministry of Human Resources (MOHR). Refer **Appendix 2** for detailed information.

Final project and industrial training are two major components in the curriculum structure which contribute to the process of developing and maintaining one's skills to an agreed standard of proficiency. Following are the explanations for these components:

i. Final Project

The final project will require students to be creative, resourceful and systematic in planning, implementing and evaluating their project through various phases. The objectives of the final project are to allow students to demonstrate a wide range of skills and foster integration of materials learned during their course of study as well as developing conceptual, communication, teamwork and other generic skills required for successful professional and working life.

ii. Industrial Training

Industry exposure in the related occupational area with an organisation provides the opportunity for students to apply what they have learnt in their course of study and to engage with the vocation/profession to which they aspire in a realistic work environment. Students learn about the skill sets required, industry demands and also work ethics. They are trained to be job-ready, thus enhancing their employability.

- 1.3.3 TVET Providers must have the autonomy to design the curriculum and to utilise the allocated resources necessary for its implementation as per the occupational/industry standards requirements.
- 1.3.4 TVET Providers must have an appropriate process to develop the curriculum leading to the approval by the related TVET authority.

- 1.3.5 TVET Providers must consult the stakeholders in the development of the curriculum.
- 1.3.6 There must be activities to enrich student experience and to foster personal development and responsibility. (This standard may not be applicable to Open and Distance Learning (ODL) programmes and programmes designed for working-adult learners.)

1.4 Programme Delivery

- 1.4.1 TVET Providers must take responsibility for ensuring the effective delivery of programme learning outcomes.
- 1.4.2 Students must be provided with, and briefed on, current information about (among others) the objectives, structure, outline, schedule, credit value, learning outcomes, and methods of assessment of the programme at the commencement of their studies.
- 1.4.3 The programme must have an appropriate full-time coordinator and a team of TVET staff (e.g., a programme committee) with adequate authority for the effective delivery of the programme.
- 1.4.4 TVET Providers must provide students with a conducive learning and training environment. (This standard must be read together with standard 5.1 in '5.0 Educational Resources'.)
- 1.4.5 TVET providers must encourage innovation in TVET delivery and assessment such as work-based learning, problem-based learning, blended learning, online learning, apprenticeship, project work, and others.
- 1.4.6 TVET Providers must obtain feedback from the stakeholders to improve the delivery of the programme outcomes.
- 1.4.7 TVET Providers must always engage with industries to enhance TVET delivery.

2.0 ASSESSMENT OF STUDENT LEARNING

Student assessment is a crucial aspect of quality assurance because it drives student learning. It is one of the most important measures to show the achievement of learning outcomes. The result of the assessment forms the basis in awarding qualifications. Hence, methods of student assessment have to be clear, consistent, effective, reliable and in line with current practices and it must clearly support the achievement of learning outcomes.

Since TVET is more practical in nature and oriented towards the world of work, its assessment methods need to confirm that an individual can satisfactorily perform a specific skill or competency according to standards set by the industry.

As such, learning outcomes in TVET cannot be adequately measured through traditional means such as paper examination. Instead, more emphasis is given to finding suitable means to demonstrate TVET learners' capacity to carry out assigned tasks in the workplace competently.

2.1 Competency-Based Assessment

- 2.1.1 Competency-based assessment is not a set of examinations, but rather it is the basis for certification of competency. It is carried out as a process for collecting evidence about the performance and knowledge of a person concerning an occupational/industry competency standard.
- 2.1.2 Some of the characteristics of competency-based assessment are:
 - i. It is based on standards that describe the expected level of job competency.
 - ii. Standards include criteria that provide details of what are considered as a good job.
 - iii. The assessment is individual; there is no comparison among candidates.
 - iv. It provides a judgement to confirm whether the candidate is competent or not yet competent.
 - v. It is done, preferably, in real working situations.

- vi. It includes the recognition of acquired competencies as a result of job experience known as the "Recognition of Prior Learning (RPL)".
- vii. It is a tool for the orientation of subsequent learning of the candidate. As such, it plays an important role in the development of skills and abilities of those assessed.
- viii. It forms the basis for the certification of job competency of the candidate.
- 2.1.3 The assessment of competencies places emphasis on actual performance that is based on specified criteria. TVET assessment methods will depend on the specific requirements of each course/module, structure, level of study and learning/competency outcome.
- 2.1.4 However, as a general guide, the following must be considered:
 - i. The use of summative and formative assessments;
 - ii. Knowledge and understanding (the cognitive domain) should be assessed through written, oral or other suitable means but practical skills should be assessed using practical evaluation such as laboratory, workshop, computer-based simulation and project work;
 - iii. For courses/modules requiring significant practical skills, a pass in practical evaluation is compulsory. (A pass implies that the examiner, using an appropriate assessment tool, is satisfied that the candidate has met the learning outcomes of the particular course/module);
 - iv. TVET Providers are encouraged to use a variety of methods and tools appropriate for measuring the learning outcomes; and
 - v. TVET Providers must involve industries in the assessment process to ensure assessment is aligned with industry requirements.

2.1.5 The various aspects and suggested methods of assessment are shown in the following table:

Table 3: Suggested Assessment Methods

Level	Type of Assessment (%)		Focus of Assessment (%)		Assessment Criteria	Suggested Assessment Methods	Suggested/ Appropriate Assessors
	Continuous	Summative	Theory	Practical			
Certificate / Level 1	70 - 100	0 - 30	10 - 30	70 - 90	 Knowledge Practical Skills Functional Skills Personal and Ethical Skills 	 Observation Demonstration Presentation Practical assessment Written tests Portfolio/log book Laboratory reports Interview/Oral test Project 	 TVET Providers Industry External verifiers appointed by programme owners/ accreditation bodies

Level	Type of Assessment (%)		Focus of Assessment (%)		Assessment Criteria	Suggested Assessment Methods	Suggested/ Appropriate Assessors
	Continuous	Summative	Theory	Practical			
Certificate / Level 2	70 - 100	0 - 30	10 - 30	70 - 90	 Knowledge Practical Skills Functional Skills Personal and Ethical Skills 	 Observation Demonstration Presentation Practical assessment Written tests Portfolio/log book Laboratory reports Interview/ Oral test Project 	 TVET Providers Industry External verifiers appointed by programme owners/ accreditation bodies
Certificate / Level 3	70 - 100	0 - 30	20 - 30	70 - 80	 Knowledge Practical Skills Functional Skills Personal and ethical skills 	ObservationDemonstrationPresentationPractical assessmentWritten tests	 TVET Providers Industry External verifiers appointed by programme

Level	Type of Assessment (%)		Focus of Assessment (%)		Assessment Criteria	Suggested Assessment Methods	Suggested/ Appropriate Assessors
	Continuous	Summative	Theory	Practical			
						 Portfolio/log book Laboratory reports Interview/Oral test Project 	owners/ accreditation bodies
Diploma / Level 4	50 - 100	0 - 50	30 - 40	60 - 70	 Knowledge Practical Skills Functional Skills Personal and Ethical Skills 	 Observation Demonstration Presentation Practical assessment Written tests Portfolio/log book Laboratory reports Interview/Oral test Project 	 TVET Providers Industry Professional bodies External verifiers appointed by programme owners/ accreditation bodies

Level	Type of As	ssessment %)	Asses	eus of ssment %)	Assessment Criteria	Suggested Assessment Methods	Suggested/ Appropriate Assessors
	Continuous	Summative	Theory	Practical			
Advanced Diploma / Level 5	50 - 100	0 - 50	30 - 40	60 - 70	 Knowledge Practical Skills Functional Skills Personal and Ethical Skills 	 Observation Demonstration Presentation Practical assessment Written tests Portfolio/log book Laboratory reports Interview/Oral test Project 	 TVET Providers Industry Professional bodies External verifiers appointed by programme owners/ accreditation bodies

2.2 The Relationship between Assessment and Learning Outcomes

- 2.2.1 Assessment principles, methods and practices must be aligned to the achievement of learning outcomes of the programme, consistent with the levels defined in the MQF.
- 2.2.2 The alignment between assessment and the achievement of learning outcomes of the programme must be systematically and regularly reviewed to ensure its effectiveness.
- 2.2.3 Assessment methods to measure the practical skills (psychomotor domain) need to be aligned with the competency level to ensure the achievement of prescribed skills.
- 2.2.4 Assessment methods to measure the functional, personal and ethical skills need to be aligned with the competency level to ensure the achievement of learning outcomes.

2.3 Assessment Methods

- 2.3.1 The frequency, methods, and criteria of student assessment including the grading system and appeal policies must be documented and communicated to students on the commencement of the programme.
- 2.3.2 There must be a variety of methods and tools that are appropriate for the assessment of learning outcomes and competencies.
- 2.3.3 There must be mechanisms to ensure and to periodically review the validity, reliability, currency and fairness of the assessment methods.
- 2.3.4 Changes to student assessment methods must follow established procedures and regulations and communicated to the student prior to their implementation.
- 2.3.5 TVET Providers must establish a clear policy on the grading system and passing mark based on the course/module, discipline and level of study.

2.4 Management of Student Assessment

- 2.4.1 The department/TVET Providers and their teaching staff must have an adequate level of autonomy in the management of student assessment. (This standard may not be applicable to certain programmes' arrangement.)
- 2.4.2 There must be mechanisms to ensure the security of assessment documents and records.
- 2.4.3 The assessment results must be communicated to students before the commencement of a new semester to facilitate progression decision.
- 2.4.4 The department/TVET Providers must have appropriate guidelines and mechanisms for students to appeal against their course results.
- 2.4.5 The department/TVET Providers must periodically review the management of student assessment and act on the findings of the review.

3.0 STUDENT SELECTION AND SUPPORT SERVICES

3.1 Student Articulation and Transfer

TVET Providers must have well-defined policies and mechanisms to facilitate student transfer within and between institutions as well as cross-border.

The implementation of a single Quality Assurance System for TVET enhances the learning pathway for TVET graduates in terms of their progression to higher TVET programmes including industry certification, diversion to academic programmes and continuing education after joining the profession.

The learning pathway has been modified to enhance its flexibility and inclusivity in addressing equivalency of graduate progression from the academic and TVET sector, as well as those who progress through learning by experience.

The TVET education pathway is further enhanced **based on the following principles**:

- 3.1.1 The eligibility to enter the MQF Level 6 TVET Bachelor's Degree programme is based on the suitability of the field of the TVET programme at MQF Level 4 or MQF Level 5.
 - i. An individual with MQF Level 4 TVET or MQF Level 5 TVET qualification in a relevant field will be given an opportunity to progress to the MQF Level 6 TVET programme. The Senate/Academic Board of the receiving institution is responsible for determining the suitability and eligibility of the candidates.
 - ii. TVET providers are encouraged to design an appropriate MQF Level 6 Bachelor's Degree programme to enable the admission of MQF Level 4 TVET or MQF Level 5 TVET graduates.

- 3.1.2 Students are advised to remain at the TVET route up to MQF Level 4 or MQF Level 5 before pursuing their studies in the MQF Level 6 Bachelor's Degree programme.
 - i. TVET students are encouraged to remain in the TVET stream up to MQF Level 4 TVET or MQF Level 5 TVET in order to obtain maximum progression to the highest level in the TVET system before furthering their studies in the MQF Level 6 Bachelor's Degree programme.
 - ii. Students with MQF Level 3 TVET qualification who wish to improve their self-potential by furthering their studies in the MQF Level 4 academic programme may be subjected to additional requirements such as appropriate screening tests or coaching/bridging programmes. The same principle applies to students from the MQF Level 3 academic programme who wish to access the MQF Level 4 TVET programme.
- 3.1.3 In principles, SPM or equivalent qualifications is not a requirement for student who follow TVET route which is designed without going through SPM or equivalent.
 - Learners who opt for the TVET route where the programmes are designed to meet TVET needs and the MQF requirements shall be recognised.
 - ii. Learners who have met the minimum requirements of the programme shall be allowed to progress further as they have acquired the basic knowledge during their learning process.
 - iii. SPM or an equivalent qualification is not an entry requirement for a TVET programme that is designed without the learner having to attend the SPM or equivalent examinations. For example, the Malaysian Vocational Certificate (SVM)/ Malaysian Vocational Diploma (DVM) and Malaysian Skills

- Certificate (SKM)/ Malaysian Skills Diploma (DKM)/ Malaysian Skills Advanced Diploma (DLKM) routes.
- iv. TVET graduates with the TVET qualification at MQF Level 4 or MQF Level 5 usually are 19 years old or older. Therefore, it is inappropriate for these graduates to sit for the examinations offered for those at the age of 17.
- v. TVET Providers shall impose additional requirements such as an SPM or equivalent qualification if the programme requires the students to possess a certain level of knowledge or competency. For example, normally the aviation field study requires an SPM or equivalent qualification.
- 3.1.4 TVET Providers is required to set the entry requirements and conduct appropriate screening and guidance programmes based on students' achievements, areas and programme designs to assist students in completing their studies. The TVET providers is encouraged to design an academic or TVET programme that provides a seamless path for TVET graduates.
 - TVET Providers shall set entry requirements that are appropriate for the field and programme design.
 - ii. If the designed programme requires specific competencies, the TVET Providers shall conduct appropriate screening such as tests, portfolio, interviews and others.
 - iii. The screening results will be used to determine the eligibility of the student to progress to a higher level.
 - iv. TVET Providers may provide guidance to the student through additional classes, mentor-mentee programme or others if necessary.

- 3.1.5 Credit transfer and bridging programmes may be implemented by TVET Providers based on suitability.
 - i. Credit transfer may be accorded to candidates who have attended a study programme/qualification level/module and attained the specified level of competency. It is based on the achievement of learning outcomes equivalent to the subject/course/module of the programme applied.
 - ii. Bridging programmes may be implemented to reduce the gap of knowledge which forms the foundation of a particular field/programme.
- 3.1.6 TVET graduates may progress to suitable MQF Level 7 Masters subject to fulfilling the entry requirements as stated below:
 - i. possess an MQF Level 6 Bachelor's Degree; or
 - ii. possess the MQA Level 7 Accreditation of Prior Experiential Learning (APEL) certification.
- 3.1.7 TVET graduates with an MQF Level 7 Masters qualification may further their studies to the relevant MQF Level 8 Doctorate programme.
- 3.1.8 Students may proceed to any relevant TVET programme at any level of qualification using the prior learning/achievement recognition implemented by MQA and DSD.
 - i. Individuals without formal qualifications may enter an appropriate TVET programme at MQF Level 1–3 Certificate, MQF Level 4 Diploma, and MQF Level 5 Advanced Diploma programme based on the related level of competence and working experience.

- ii. Individuals who have completed their studies at any level of the TVET programme through prior learning/achievement recognition may further their studies to a higher level.
- 3.1.9 The TVET Quality Assurance Joint Technical Committee (JTC) will continuously monitor and revise the effectiveness of TVET articulation implementation and ensure its relevancy and currency.

The JTC is responsible for ensuring the articulation principles are in line with the current development of higher education within and outside the country to stay relevant.

- 3.1.10 The criteria and processes of student selection must be transparent and objective.
- 3.1.11 Student enrolment must comply with/be related to the capacity of the department/TVET Providers to effectively deliver the programme. (This standard must be read together with the standards in '4.0 Teaching Staff' and '5.0 Educational Resources'.)
- 3.1.12 There must be a clear policy and appropriate mechanisms for appeal on student selection.
- 3.1.13 The department/TVET Providers must offer appropriate developmental or remedial support to assist students who are in need.
- 3.1.14 The TVET Providers must ensure that the incoming transfer students have the capacity to follow the programme successfully. To address the competency gap, the TVET Providers may conduct entry assessment or bridging programmes/intensive classes.

3.2 Student Support Services

3.2.1 Students must have access to appropriate and adequate support services, such as physical, social, financial, recreational and online

- facilities; academic and non-academic counselling; and health services.
- 3.2.2 There must be a designated administrative unit with a prominent organisational status in the TVET Providers, staffed by individuals who have appropriate experience, to assume the responsibility for planning and implementing student support services.
- 3.2.3 An effective induction to the programme must be available to new students with special attention given to out-of-state and international students as well as students with special needs.
- 3.2.4 Academic, non-academic and career counselling must be provided by adequate and qualified staff.
- 3.2.5 There must be mechanisms that actively identify and assist students who are in need of training as well as spiritual, psychological and social support.
- 3.2.6 TVET Providers must have clearly defined and documented processes and procedures for handling student disciplinary cases.
- 3.2.7 There must be an effective mechanism for students to voice their grievances and seek resolution on training and non-training matters.
- 3.2.8 Student support services must be evaluated regularly to ensure their adequacy, effectiveness and safety.

3.3 Student Representation and Participation

- 3.3.1 There must be well-disseminated policies and processes for active student engagement especially in areas that affect their interest and welfare.
- 3.3.2 There must be adequate student representation and organisation.
- 3.3.3 A student must be facilitated to develop linkages with external stakeholders and to participate in activities to gain managerial, entrepreneurial, innovation and leadership skills in preparation for the workplace.

3.3.4 Student activities and organisations must be facilitated to encourage student participation in activities that promote character building; inculcate lifelong learning, a sense of belonging, responsibility, and intercultural values; and promote active citizenship.

3.4 Alumni

3.4.1 TVET Providers must encourage the alumni to play a role in the development, review and continuous improvement of the programme and in preparing the students for their professional future through linkages with industry and the professions.

4.0 TEACHING STAFF

The quality of the teaching staff is one of the most important components in assuring the quality of higher education, and thus every effort must be expended to establish proper and effective recruitment, service, development and appraisal policies that are conducive to staff productivity.

It is important that every programme has appropriately qualified and sufficient number of teaching staff. The numbers recruited have to be adequate for, and appropriate to, the needs of the programmes.

4.1 Recruitment and Management

- 4.1.1 TVET Providers must have a clearly defined plan for their teaching manpower needs, consistent with institutional policies and programme requirements.
- 4.1.2 TVET Providers must have a clear and documented teaching staff recruitment policy where the criteria for selection are based primarily on academic merit and industry experience.
- 4.1.3 Below are the qualifications of teaching staff for TVET programmes for all levels of study as visualised in the MQF:

Table 4: Qualification Requirements

Qualification/ MQF Level	Qualifications of Teaching Staff
Certificate/ TVET L1	MQF Level 3 TVET Certificate in the relevant field; OR
	MQF Level 3 Certificate in the relevant field; OR
	MQF Level 4 TVET Diploma in the relevant field; OR
Certificate/	
TVET L2	MQF Level 4 Diploma in the relevant field.
	AND certification of teaching competency.

Qualification/ MQF Level	Qualifications of Teaching Staff
Certificate/ TVET L3	MQF Level 4 TVET Diploma in the relevant field; OR
	MQF Level 4 Diploma in the relevant field.
	AND certification of teaching competency.
Diploma/ TVET L4	MQF Level 5 TVET Advanced Diploma in the relevant field; OR
	MQF Level 5 Advanced Diploma in the relevant field; OR
	Bachelor's Degree in the relevant field with 1 year of related industrial experience.
	AND certification of teaching competency.
Advanced Diploma/ TVET L5	MQF Level 5 TVET Advanced Diploma in the relevant field; OR
	MQF Level 5 Advanced Diploma in the relevant field; OR
	Bachelor's Degree in the relevant field with 2 years of related industrial experience.
	AND certification of teaching competency.

- 4.1.4 The industrial experience must be significant to the Discipline Core Modules (functional) of the taught programme.
- 4.1.5 Teaching staff/industry experts who do not fulfil the minimum/specified qualification but possess more than five (5) years of accumulated related industrial experience may be considered. However, certification of teaching competency is still a compulsory requirement. TVET Providers may

- acknowledge and recognise the candidate's related experience, knowledge from previously enrolled courses, peer review and others.
- 4.1.6 For professional programmes, the qualifications of the teaching staff will be determined by the respective professional bodies.
- 4.1.7 The maximum staff-student ratio for the TVET programme is 1:25.
- 4.1.8 All the teaching staff shall be appointed by TVET Providers in advance when applying for accreditation.
- 4.1.9 TVET Providers must have adequate full-time teaching staff responsible for implementing the programme. The full-time teaching staff should form at least 60% of the total staff. (This standard must be read together with the "Guidelines to Good Practices: Academic Staff".)
- 4.1.10 The policy of the TVET Providers must reflect an equitable distribution of responsibilities among the teaching staff.
- 4.1.11 Recognition and reward through promotion, salary increment or other remuneration must be based on clear and transparent policies and procedures.
- 4.1.12 TVET Providers must be guided by considerations which are in line with national policy and international good practices in teaching appointment and promotion exercise.
- 4.1.13 TVET Providers must have collaboration with industry and/or stakeholders to provide for the involvement of professionals and practitioners in order to enhance the teaching and learning of the programme.

4.2 Service and Development

- 4.2.1 TVET Providers must have policies addressing matters related to service, development and appraisal of the teaching staff.
- 4.2.2 The teaching staff must be given sufficient autonomy to focus on their respective areas of expertise.

- 4.2.3 TVET Providers must have clear policies and procedures for handling disciplinary cases involving the teaching staff and on conflict of interest, particularly in the areas of professional conduct, private practice, multiple employment, and consultancy services.
- 4.2.4 TVET Providers must have mechanisms and processes for periodic student evaluation of the teaching staff for the purpose of quality improvement.
- 4.2.5 TVET Providers must have a development programme and continuous professional enhancement for the teaching staff.
- 4.2.6 TVET Providers must require all the in-service teaching staff to participate in staff industrial attachment for a cumulative period of one month in every two years.
- 4.2.7 TVET Providers must provide opportunities for the teaching staff to participate in professional, training and other relevant activities at national and international levels and to obtain professional qualifications to enhance the teaching-learning experience.
- 4.2.8 TVET Providers must encourage and facilitate their teaching staff to play an active role in community engagement activities.

5.0 EDUCATIONAL RESOURCES

Adequate educational resources are necessary to support the teaching and learning activities of a programme. These include all the required academic and instructional expertise, physical facilities, information and communication technologies, research facilities, and finance.

The physical facilities of a programme are guided mainly by the needs of the specific fields of study. Where appropriate, research facilities may be included as part of educational resources because a research-active environment improves the quality of higher education. Sufficient and recent resources are to be allocated to support and sustain research.

It is essential for the resources and services to be relevant, accessible, available and fully utilised by the students. These considerations must be taken into account in evaluating the effectiveness of educational resources.

5.1 Physical Facilities

- 5.1.1 TVET Providers must provide sufficient, relevant and appropriate physical facilities and training resources at the commencement of the programme to ensure its effective delivery including facilities for practical-based programmes and for those with special needs.
- 5.1.2 TVET Providers may contract up to 40% of the equipment and facilities required for the delivery of the programme with suitable partners.
- 5.1.3 The physical facilities and training resources of the TVET Providers and where applicable, the collaborating partners, must comply with the relevant laws and regulations.
- 5.1.4 The library or resource centre must have adequate and up-to-date conventional and/or digital reference materials, computers and internet access.
- 5.1.5 The training resources, services and facilities must be periodically reviewed and improved upon to maintain their quality and appropriateness for current education and training.

- 5.1.6 TVET Providers must allocate adequate funds to carry out scheduled maintenance of all facilities and equipment including their replacement or upgrading.
- 5.1.7 TVET Providers must have adequate facilities and resources to encourage research and support innovation.

5.2 Expertise in Education

5.2.1 TVET Providers must utilise training experts (especially those with expertise in pedagogy and assessment methods) in the planning of their programmes and the development of new teaching and assessment methods.

5.3 Financial Resources

- 5.3.1 TVET Providers must have clear procedures to ensure effective financial planning and efficient use of resources.
- 5.3.2 TVET Providers must have adequate funds to carry out all training and education activities required to achieve the learning outcomes.

6.0 PROGRAMME MANAGEMENT

There are many ways of administering a TVET institution, and the methods of management differ amongst TVET Providers. Nevertheless, governance that reflects the leadership of a TVET organisation must emphasise excellence and scholarship. It is crucial that the leadership provides clear guidelines and direction, builds relationships amongst the different constituents based on collegiality and transparency, manages finances and other resources with accountability, forges partnerships with significant stakeholders in training delivery and consultancy, and dedicates itself to training and scholarly endeavours. Whilst formalised arrangements can protect these relationships, they are best developed by a culture of reciprocity, mutuality and open communication.

6.1 Governance

- 6.1.1 TVET Providers must clarify their structure and function and the relationships between them, and these must be communicated to all parties involved based on the principles of responsibility, accountability and transparency.
- 6.1.2 TVET Providers must have policies, procedures and mechanisms for regular reviewing and updating of their structures, functions, strategies and core activities to ensure continuous quality improvement.
- 6.1.3 The academic board/committee of the department/TVET Providers must be an active policy-making body with an adequate degree of autonomy.
- 6.1.4 Mechanisms for ensuring functional integration and comparability of educational quality must be established for programmes conducted in campuses or partner institutions/industries that are geographically separated.
- 6.1.5 TVET Providers must have a formal committee system responsible for internal and external consultation, feedback, market needs analysis and employability projections of the programme. (This standard must be read together with standards 2.2.2 and 2.3.2 in '2.0 Programme Development and Delivery'.)
- 6.1.6 The governance of the department/TVET Providers must involve the participation of, and consultation with, teaching staff, students and external stakeholders.

6.2 Programme Leadership

- 6.2.1 The criteria for the appointment and the responsibilities of the TVET programme leader must be clearly stated.
- 6.2.2 The leadership of the programme must be helmed by those with appropriate qualifications and experience, and with sufficient authority for curriculum design, delivery and review in line with the criteria developed.
- 6.2.3 There must be mechanisms and processes to allow for communication between the programme and the leadership on matters such as staff recruitment and training, student admission, allocation of resources and decision-making processes.

6.3 Administrative Staff

- 6.3.1 TVET Providers must have a sufficient number of qualified administrative staff with TVET experience to support the implementation of the programme and related activities.
- 6.3.2 TVET Providers must conduct a regular performance review of the administrative staff of the programme.
- 6.3.3 TVET Providers must have an appropriate training scheme for the advancement of the administrative staff as well as to fulfil the specific needs of the programme.

6.4 Records Administration

- 6.4.1 TVET Providers must have appropriate policies and practices concerning the nature, content and security of student and teaching staff records.
- 6.4.2 TVET Providers must implement policies on the rights of individual privacy and the confidentiality of records.
- 6.4.3 TVET Providers must continuously review policies on the security of records including the increased use of electronic technologies and safety systems.

7.0 PROGRAMME MONITORING, REVIEW AND CONTINUAL QUALITY IMPROVEMENT

Quality enhancement calls for programmes to be regularly monitored, reviewed and evaluated. This includes the monitoring, reviewing and evaluating of institutional structures and processes (administrative structure, leadership and governance, planning and review mechanisms), curriculum components (syllabi, teaching methodologies, learning outcomes) as well as student progress, employability and performance.

Feedback from multiple sources such as students, alumni, teaching staff, employers, professional bodies and parents must be obtained to assist in enhancing the quality of the programme. Their feedback and the corresponding actions taken should be documented for auditing purposes.

7.1 Mechanisms for Programme Monitoring, Review and Continual Quality Improvement

- 7.1.1 TVET Providers must have clear policies and appropriate mechanisms for regular monitoring and review of the programme.
- 7.1.2 TVET Providers must have a dedicated unit or personnel responsible for internal quality assurance (IQA).
- 7.1.3 TVET Providers must have a mechanism for continuous monitoring and reviewing of the programme to ensure its currency and relevancy.
- 7.1.4 TVET Providers' review system must constructively engage the stakeholders including the alumni and employers as well as the external expertise, whose views are taken into consideration.
- 7.1.5 TVET Providers must make the programme review report accessible to stakeholders in order to seek their views.
- 7.1.6 Various aspects of student performance, progression and attrition must be analysed for the purpose of continual quality improvement by TVET Providers.
- 7.1.7 TVET Providers must have a monitoring and review committee with representatives from the industries/academia related to the programme.

- 7.1.8 The findings of a programme review must be presented to the top management of TVET Providers for its attention and further action.
- 7.1.9 There must be a link between the quality assurance processes and the achievement of the institutional purpose.
- 7.1.10 TVET Providers must establish assessment instruments/tools/equipment with the involvement of the industry to assess their graduate students.
- 7.1.11 There must be an indicator to measure the industry's satisfaction with the quality of TVET graduates for the purpose of employability.

Section 3

TVET Quality Assurance Assessment Process

1.0 PROGRAMME ACCREDITATION

Programme accreditation is a process of external evaluation which consists of submission by the TVET Provider, review by the Panel of Assessors, and endorsement by relevant committees at MQA and DSD.

For the purpose of this section, the MQA accreditation consists of 'Provisional Accreditation' and 'Full Accreditation', whereas the DSD accreditation consists of 'Accreditation' and 'Renewal Accreditation'.

1.1. Accreditation Process

- 1.1.1. The accreditation process consists of several stages, as follows:
 - The TVET Provider submits the relevant documents to MQA or DSD for evaluation. This includes the programmes regulated by professional bodies. For programmes regulated by licensing authorities, prior approval by relevant authorities is necessary.
 - ii. MQA or DSD will scrutinise the documents to ensure that they are complete.
 - iii. The respective agency will appoint a Panel of Assessors (POA) from the TVET Pool of Assessors endorsed by the Joint Technical Committee; the POA will commence the evaluation exercise based on the stipulated timeline and process.
 - iv. The POA shall produce a report and recommendation of accreditation which will be presented to and endorsed by the Accreditation Committee of MQA or the Technical Committee of DSD.

v. The accredited programme, upon fulfilment of specified requirements, will be registered in the Malaysian Qualifications Register (MQR).

1.1.2 The process flow of accreditation is shown below:

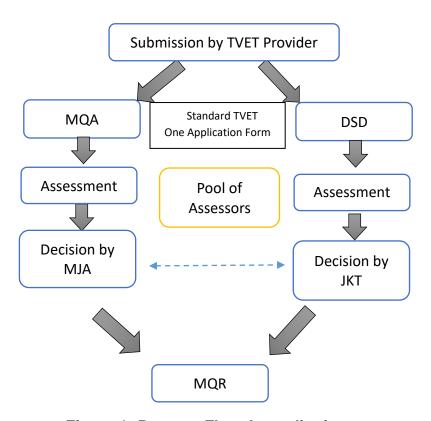


Figure 1: Process Flow Accreditation

1.1.3 Joint Technical Committee (JTC)

The Joint Technical Committee (JTC) is an inter-agency mechanism for coordinating the evaluation and accreditation process of the TVET programme.

The committee consists of representatives from the following:

- i. Chief Executive Officer of MQA and Director General of DSD Joint Chairmanship;
- Deputy Chief Executive Officer of MQA and Deputy Director General of DSD;

- iii. Senior Director of Accreditation (MQA) and Director of Malaysian Occupational Skills Qualifications (DSD);
- iv. One representative from the Ministry of Education (Higher Education Sector);
- v. One representative from the Ministry of Human Resources;
- vi. One representative from the Economic Planning Unit (EPU), Ministry of Economic Affairs;
- vii. One representative from the Ministry of Rural Development;
- viii. One representative from the Ministry of Youth and Sports; and
- ix. Two TVET Experts.

The roles of the Committee are as follows:

- i. To decide on policies pertaining to accreditation of TVET programmes;
- ii. To endorse the list of Occupational/Industry Standards to be applied in the evaluation process;
- iii. To endorse the list of industrial practice to be applied in the evaluation process; and
- iv. To endorse the Pool of Assessors list.

The committee may invite any person to attend a meeting or deliberation of the committee for the purpose of advising it on any matter under discussion.

1.2. Submission for Accreditation

1.2.1. The application can be submitted to either MQA or DSD based on the status of the TVET Provider, as follows:

Category	Application	Application		
	to MQA	to DSD		
Establishment	Higher Education	i. A valid and registered		
Status	Provider established	company/organisation/public		
	under Act AUKU/Act	and private training institute.		
	550/Act 555 or	ii. Higher Education Provider		
	Higher Education	established under Act		
	Provider under other	AUKU/Act 550/Act 555 or		
	ministries.	Higher Education Provider		
		under other ministries.		
Awarding	Higher Education	Certification by DSD:		
body*	Provider	(E.g.: SKM/DKM/DLKM)		
Programme	Level 3–5	Level 1–5		
Level to be				
offered				

^{*}The awarding body will determine the receiving agency

- 1.2.2. The TVET Provider should provide the required information with evidence that supports the application. The information given should be accurate, concise and complete. Failure to do so will result in rejection of the application, and the fees will not be refunded.
- 1.2.3. The TVET Provider shall submit an application for each program using the application form which consist of the following:
 - i. Part A: General Information of the TVET Provider This is an institutional profile of the TVET Provider.
 - ii. Part B: Programme Description This describes the programme, including its name, level, credit value, duration of study, entry requirement, mode of delivery, and the awarding body.
 - iii. Part C: TVET Standards

 This provides the information pertaining to the seven areas of evaluation and the standards in each of them.

The application must be submitted with fees and other documents as

prescribed by each agency.

- 1.2.4. Upon submission of the accreditation application, the TVET Provider should fulfil the requirements stated in:
 - i. The Malaysian Qualifications Framework (MQF);
 - Seven areas of the TVET Standards as stipulated in Section 2;
 - Occupational/Industry Standards as endorsed by the Joint Technical Committee (JTC); and
 - iv. Rules, regulations and policies of the Ministry of Education or the Ministry of Human Resources.

1.3. Parties to The Accreditation Process

There are typically five parties involved in the accreditation process, namely, the liaison officer, representatives of the TVET Provider, and the Panel of Assessors.

1.3.1. The Liaison Officer

The TVET Provider should appoint a liaison officer to coordinate with the respective agencies with respect to the programme accreditation. The liaison officer has the following responsibilities:

- i. To act as a resource person on behalf of the TVET Provider;
- ii. To coordinate and liaise with the respective agencies:
- iii. To assist in arranging a tentative schedule for the visit and informing all the relevant people of the audit plan;
- iv. To provide the evaluation team with the necessary facilities;
- v. To provide copies of relevant documents and records; and
- vi. To provide other relevant administrative services.

1.3.2. Representatives of the TVET Provider

The TVET Provider will be advised as to the groups of people the POA will want to interview during the evaluation visit.

The POA may request to meet the following people or categories of people:

- 1. The Chief Executive Officer / Accredited Centre Manager
- 2. Senior management of the TVET Provider, which may include the registrar
- 3. The head of Internal Quality Unit
- 4. The head of department/ programme leader
- 5. Teaching staff
- 6. Members of the board of the TVET Provider
- 7. Representatives of the industry and government, relevant to the programme
- 8. Members of the internal review committee*
- 9. Student leaders*
- 10. Cross-section of students in the programme*
- 11. A selection of graduates, where appropriate*
- 12. Others as appropriate.

In addition to the above, the evaluation process carried out by DSD requires an interview with the Accreditation Personnel (Accredited Centre Manager, Internal Verifier and "Assessors").

*in the event that the programme has been conducted.

It is important for the POA to meet each of the representatives mentioned above to obtain a cross-sectional perspective of the programme and its quality. Students and the teaching staff are two key constituents in obtaining feedback on the effectiveness of teaching-learning and the attainment of learning outcomes.

Students' opinions will be sought regarding the quality and adequacy of the academic programme and the provision of student support services, as well as their role in providing feedback to the TVET Provider on these matters. Students may also be requested to serve as guides in visits to the library, classroom, laboratories and other teaching-learning facilities.

Teaching staff's opinions are sought regarding staff development, promotion and tenure, workload distribution, teaching skills, as well as understanding of the programme's educational objectives and learning outcomes. In addition, the POA will obtain their perception of the

programme, students, the organisational culture of the TVET Provider, and the appropriateness and sufficiency of available facilities.

The POA will make judgements based on the evidence provided by the TVET Provider.

1.3.3. Panel of Assessors

The Panel of Assessors (POA) of a programme shall consist of at least two members of which one will be appointed as the Chairperson.

1.3.4. The Chairperson

The respective agencies will appoint a chairperson for the POA who will be responsible for the overall conduct of the external programme evaluation exercise.

Roles of the Chairperson:

- i. Provides effective leadership to the overall exercise;
- ii. Presents the oral exit report to the representatives of the TVET Provider;
- iii. Ensures that the oral exit report accurately summarises the outcomes of the visit and is consistent with the reporting framework; and
- iv. Collates the input of team members and ensures the completion of the report after the visit.

1.3.5. The POA Members

The respective agencies will appoint the members of the POA. The selection of members of the POA is guided by the type, level and discipline of the programme to be assessed, and by the availability, suitability, expertise and experience of the prospective panel members.

Panel members are selected so that the panel as a whole possesses the expertise and experience to enable the effective conduct of the accreditation exercise. Members may translate their different perspectives into different emphases in the evaluation process and on certain aspects of the Report.

In evaluating the TVET Provider's application for accreditation, the panel members will:

- i. assess the programme for compliance with the MQF, current policy, discipline standards and seven areas of evaluation, as well as against the educational goals of the TVET Provider and the programme;
- ii. verify and assess all the information about the programme submitted by the TVET Provider and the proposed improvement plans; and
- iii. reach a judgement.

1.4. The Programme Evaluation Process

The evaluation process is divided into three main components: before, during, and after the site evaluation visit.

When the TVET Provider submits the relevant documents for the programme evaluation purpose, the respective agency will scrutinise the documents to ensure that they are complete. The respective agency will then appoint a POA and commence the evaluation exercise based on the stipulated procedures (subject to the procedures of the respective agencies).

1.4.1. Pre-Evaluation Visit

Table 5 describes the preparatory stage before the evaluation visit by the POA.

Table 5: Typical Activities Prior to the Evaluation Visit

No.	Activities and Responsibilities					
1.	TVET Provider submits a complete accreditation application to					
	the respective agency					
2.	Respective agency:					
	a) records the application					
	b) assigns the application to the relevant officer					
	c) checks whether the information submitted is complete					
	d) notifies the TVET Provider that the evaluation process will					
	commence					
3.	Respective agency:					
	a) appoints members of the POA					
	b) forwards the application to the POA					

No.	Activities and Responsibilities
4.	The POA prepares the preliminary evaluation report
5.	The respective agency, TVET Provider and POA agree on a
	date for the evaluation visit to the TVET Provider
6.	The POA holds a preparatory meeting
7.	The POA sends the preliminary evaluation report to the
	respective agency

1.4.1.1. The Panel of Assessors' Preparatory Meeting

After receiving the preliminary report from each panel member, a Preparatory Meeting of the POA will be conducted prior to the visit. In this meeting, the POA members will:

- i. share each other's views of the TVET Provider's submission:
- ii. determine the main issues for evaluation;
- iii. review the evaluation procedures;
- iv. identify any further information, clarification or documentation required from the TVET Provider; and
- v. review the schedule of the programme evaluation visit.

Following the Preparatory Meeting, the respective agency will advise the TVET Provider if there is any further information, clarification or documentation required from the TVET Provider.

1.4.2. During the Evaluation Visit

The principal purpose of the site evaluation visit by the POA is to verify the statements, descriptions, conclusions and proposed improvement activities as presented in the accreditation submission and to acquire further insight into the programme's operations through first-hand investigation and personal interaction. A visit allows for a qualitative assessment of factors that cannot be easily documented in written form and may include inspection of facilities.

The duration of the visit can be between one and two days depending on the scope of the visit. Table 6 describes the typical activities during the site visit.

Table 6: Typical Activities during Site Visit

Activity	Persons Involved
POA Coordination Meeting	• POA
	TVET Provider Liaison Officer
Briefing by the Top Management	• POA
	TVET Provider Senior
	Management
Inspection of the facilities	• POA
	Student Guide
Meeting with Teaching Staff	• POA
	Teaching Staff
Review of Documents	• POA
Meeting with Programme Team,	• POA
Counsellors and Other Support Staff	Counsellors
	Support Staff
	Programme Team
Teaching Observations	• POA
Meeting with Students	• POA
	Students
Additional Meeting with the TVET	• POA
Provider's Staff, if required. Review	Relevant TVET Provider's Staff
of Additional Documents	
POA Review Meeting (to be	• POA
conducted intersessionary	TVET Provider's Liaison Officer
throughout the site visit)	
Finalisation of Findings by POA	• POA
Exit Meeting	• POA
	TVET Provider's
	Representatives

There will be an opening meeting in which the TVET Provider provides the background information regarding the institution and the programme.

The panel will conduct interviews with staff, students and other relevant stakeholders to clarify issues regarding the effectiveness of the programme in achieving its objectives.

The POA usually takes advantage of every appropriate opportunity to triangulate its finding through various sources. To this end, most meetings are not single-purpose meetings. Interviewees may, within reason, expect to be asked about anything within the scope of the programme evaluation. The POA, already equipped with the background information of the programme, reaches its final conclusions through interviews and observations, as well as through its consideration of the additional documentary evidence supplied.

To conclude the visit, the POA meets to formalise its preliminary findings which are then reported orally to the TVET Provider.

1.4.2.1. The Oral Exit Report

At the end of the visit, the Chairperson delivers an oral report to the TVET Provider on behalf of the POA. The oral report highlights the programme's areas of strengths and emphasises the areas of concern and opportunities for improvement. All key elements must be covered in the oral exit report so that the final written report is consistent with the oral report.

The Chairperson provides opportunities for members of the TVET Provider to seek clarifications on points raised in the oral report. The Chairperson should advise the members of the TVET Provider that the findings given in the oral report are not final. The findings will be presented in more detail in the written Final Evaluation Report.

1.4.3. Post-Evaluation Visit

Table 7 describes the activities undertaken after the evaluation visit.

Table 7: Typical Activities for Post-Evaluation Visit

	Activities and Responsibilities
1.	Chairman of the POA:
	a) collates the reports of the panel members
	b) sends the final report to the respective agency
2.	The respective agency sends the final report to the TVET
	Provider for verification of facts

	Activities and Responsibilities
3.	The TVET Provider sends feedback on the evaluation report to
	the respective agency
4.	The respective agency sends the feedback to the Chairman
5.	The Chairman evaluates the feedback
6.	The respective agency's Vetting Committee reviews the report and recommendation for submission to the Accreditation Committee (MQA) or Technical Committee (DSD)
7.	The report and recommendation is tabled before the Accreditation Committee (MQA) or Technical Committee (DSD) for decision
8.	The respective agency notifies the TVET Provider of the decision

1.4.3.1. The Final Evaluation Report

The panel reaches its conclusions and recommendations through observed facts and through its interpretation of specific evidence received from various sources or that it has gathered itself. The panel's report will generally focus on areas of concern (recommendations) and suggestions for improving the programme. However, the report may also include commendations (aspects of the provision of the programme that are considered worthy of praise) and affirmations (proposed improvements by the department on aspects of the programme, which the POA believes to be significant and which it welcomes).

1.5. Decisions on The Programme Accreditation

Based on the findings contained in the final evaluation report, the POA may propose one of the following:

- Grant the accreditation with/without conditions
- ii. Deny the accreditation (with reasons)

For professional programmes, the application will be decided by the relevant Professional Bodies based on the recommendation of the Joint Technical Committee set up by the respective Professional Bodies, of which MQA is a member.

All provisionally accredited programmes by MQA will be registered in the List of Provisionally Accredited Programmes while all accredited programmes by MQA and DSD will be issued a certificate of accreditation and registered in the Malaysian Qualifications Register (MQR).

1.6. Appeal

The TVET Provider can appeal against the decision of the Accreditation Committee of MQA / Technical Committee of DSD. Generally, the appeal can be made concerning the factual contents of the report; any substantive errors within the report; or substantive inconsistencies between the oral exit report, the final evaluation report and the decision of the Accreditation Committee of MQA / Technical Committee of DSD. Any appeal shall be handled in accordance with the procedures of the respective agencies.

Appendices

Appendix 1

List of Panel Members

No.	Panel Members	Organisation
1.	Prof. Dr. Wahid Bin	Vice Chancellor
	Razzaly	Universiti Tun Hussein Onn Malaysia
	(Chairman)	(Also as a representative for Malaysian Technical
	Duck Du III Harman Chah	University Network, MTUN)
2.	Prof. Dr. Hj. Hazman Shah Bin Abdullah	Deputy Chief Executive Officer (Quality Assurance) Malaysian Qualifications Agency (MQA)
	Bill Abdullari	(until 9 June 2018)
3.	Prof. Dr. Mohamad	Dean
0.	Abdullah Bin Hemdi	Faculty of Hotel and Tourism Management
	, todanan zin roma	Universiti Teknologi MARA
4.	Tuan Haji Wan Izni	Director
	Rashiddi Bin Wan Mohd	Bahagian Akademik dan Pendidikan Berterusan
	Razalli	Jabatan Pendidikan Kolej Komuniti
5.	En. Mahzan Bin Teh	Director
		Vocational dan Technical Division
	<u> </u>	Majlis Amanah Rakyat
6.	Dr. Noor Hisham Bin	Vocational Training Officer
	Jalani Exportion Field of	Bahagian Pengurusan dan Penyelengaraan Aset
	[Expertise – Field of Engineering]	Advanced Technology Training Center (ADTEC) Batu Pahat
7.	Pn. Nabilah Ooi Binti	Chief Operation Officer (Training & Development)
'	Abdullah	German Malaysian Institute
8.	En. Zainuren Bin Hj. Mohd	Director
	Noor	Technical and Vocational Education Division (BPTV)
		Ministry of Education Malaysia
9.	En. Mohd Nor Bin Dollah	Principal Assistant Director
		Malaysian Occupational Skills Qualification (MOSQ)
		Division Development
10	Do Chohaul Naissah Disti	Department of Skills Development
10.	Pn. Shahrul Naimah Binti	Head of Division
	Zulkifli [Expertise – Field of	Pengajian Umum dan Penyelarasan Kawalan dan Kualiti
	Hospitality]	Institut Kemahiran Tinggi Belia Negara (IKTBN) Alor
		Gajah
11.	Pn. Noor Aidi Binti Nadzri	Head of Unit
		TVET Special Project Unit
<u></u>		Jabatan Pendidikan Politeknik
12.	En. Ab Jalil Bin Md Noor	Consultant
40	For Vincent Oliver To	SIRIM Berhad
13.	En. Vincent Chong Toong	Chief Executive Officer
	Shing	MASC Tech(M) Sdn. Bhd.

Appendix 2

Core Abilities

CORE					
ABILITIES	Level 1	Level 2	Level 3	Level 4	Level 5
GROUP	CA Title	CA Title	CA Title	CA Title	CA Title
Communication	Basic Working Communication	Communication Application	Effective Communication	Effective Communication Collaboration	Communication Management Skill
Interpersonal Skill	Personal Behaviour Skill	Interpersonal Behaviour	Leadership Skill	Organization Behaviour Awareness	Organizational Management Skill
Etiquette Management	Work Place Ethics Awareness	Work Place Culture Behaviour	Work Place Ethics	Etiquette Practices	Etiquette Management Skill
Health, Safety & Environment	Health, Safety And Environmental Awareness	Health, Safety And Environment Adaptation	Health, Safety and Environment Consciousness	Health, Safety and Environment Monitoring	Health, Safety and Environment Cognition
Using Technology			Information Technology Awareness	Information Technology Application	Information Technology Management
Management Skills			Administrative Skill	Relationship Management Capability	Networking Skill
Change Management				Change Management Awareness	Change Management Implementation
Strategic Thinking				Strategic Thinking Skill	Strategic Resolution

References

- David H. Fretwell. (2001). A Framework for Defining and Assessing Occupational and Training Standards for Developing Countries. Published by World Bank, EU.
- Department of Skills Development, Ministry of Human Resources. (2013). *Written Instructional Materials* WIM. Malaysia.
- Department of Skills Development, Ministry of Human Resources. (2011). Kod Amalan Pentauliahan Program Kemahiran (KAPPK). Malaysia.
- Malaysian Qualifications Agency (2018). *Malaysian Qualifications Framework MQF 2nd Edition*. Petaling Jaya, Malaysia.
- Malaysian Qualifications Agency (2017). *Code of Practice for Programme Accreditation COPPA* 2nd Edition. Petaling Jaya, Malaysia.
- Malaysian Qualifications Agency (2014). *Guidelines to Good Practices: Assessment of Students*. Petaling Jaya, Malaysia.
- Malaysian Qualifications Agency (2014). *Guidelines to Good Practices: Academic Staff.*Petaling Jaya, Malaysia.
- Malaysian Qualifications Agency (2011). *Guidelines to Good Practices: Curriculum Design and Delivery.* Petaling Jaya, Malaysia.
- Ministry of Education (2015). Malaysia Education Blueprint 2015-2025 (Higher Education). Putrajaya, Malaysia.
- Regional Cooperation Programme to Improve the Training of TVET Personnel (RECOTVET)
- UNESCO (2015), "Level-setting and recognition of learning outcomes: The use of level descriptors in the twenty-first century", UNESCO, Paris. http://unesdoc.unesco.org/images/0024/002428/242887e.pdf