

# POLYTECHNICS HEADS OF DEPARTMENTS MEETING

## 30 JUN 2010

### QUALITY ASSURANCE - WHAT, WHY AND HOW

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Budaya kualiti adalah satu aspek besar dan penting yang perlu dikongsi oleh semua pihak. Ini adalah kerana dimensi kualiti adalah **penanda kepada kecemerlangan akademik** dan pencapaian-pencapaian kita yang lain. Dalam konteks sektor pengajian tinggi saya berharap semua mengambil **langkah yang lebih besar** dan **persisted** untuk membangunkan inisiatif-inisiatif untuk **peningkatan dan pematuhan kualiti secara menyeluruh dan berterusan** berpandukan kepada semangat *kai-zen* atau peningkatan kualiti secara berterusan.

Perutusan Tahun Baru 2010  
Y.B. Menteri Pengajian Tinggi

- Quality Assurance is the **planned** and **systematic** activities or processes necessary to provide adequate confidence that the product or service will **meet the given requirements**.
- Quality Assurance in higher education refers to a **series of review procedures** designed to **safeguard academic standards** and **promote learning opportunities** for students.

The UNESCO definition (Vlăsceanu *et al.*, 2004) of quality in education portrays the multi-faceted concept of quality in education:

Quality in higher education is a multi-dimensional, multi-level, and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives, as well as to specific standards within a given system, institution, programme, or discipline. Quality may thus take different meanings depending on: (i) the understandings of various interests of different constituencies or stakeholders in higher education (quality requirements set by student/university discipline/labour market/society/ government); (ii) its references: inputs, processes, outputs, missions, objectives, etc.; (iii) the attributes or characteristics of the academic world which are worth evaluating; and (iv) the historical period in the development of higher education. (pp 46–48)

Majumdar, Khambayat, Gayondato & Sorollo (2009) define quality assurance in TVET as:

...systematic management and assessment procedures adopted by an educational institution or system to monitor performance and to ensure achievement of quality outputs or improved quality. Quality assurance aims to give stakeholders confidence about the management of quality and the outcomes achieved.

Three important measures of Quality Assurance in TVET institutions:

- Validation of qualifications and/or standards
- Accreditation and audit of education and training institutions
- Quality assurance of assessment leading to the award of qualifications

Majumdar et. al., (2009)

Quality Improvement in VET as:

- Involving development of industry standards
- Development of the corresponding curriculum for courses and training programs
- **Establishing mechanisms for accreditation and national recognition**
- Provision for flexible methods of delivery and outcomes-based assessment
- Certification of students achievement

Susan Holland as cited in Majumdar et. al., 2009

# ACADEMIC QUALITY ASSURANCE NETWORK

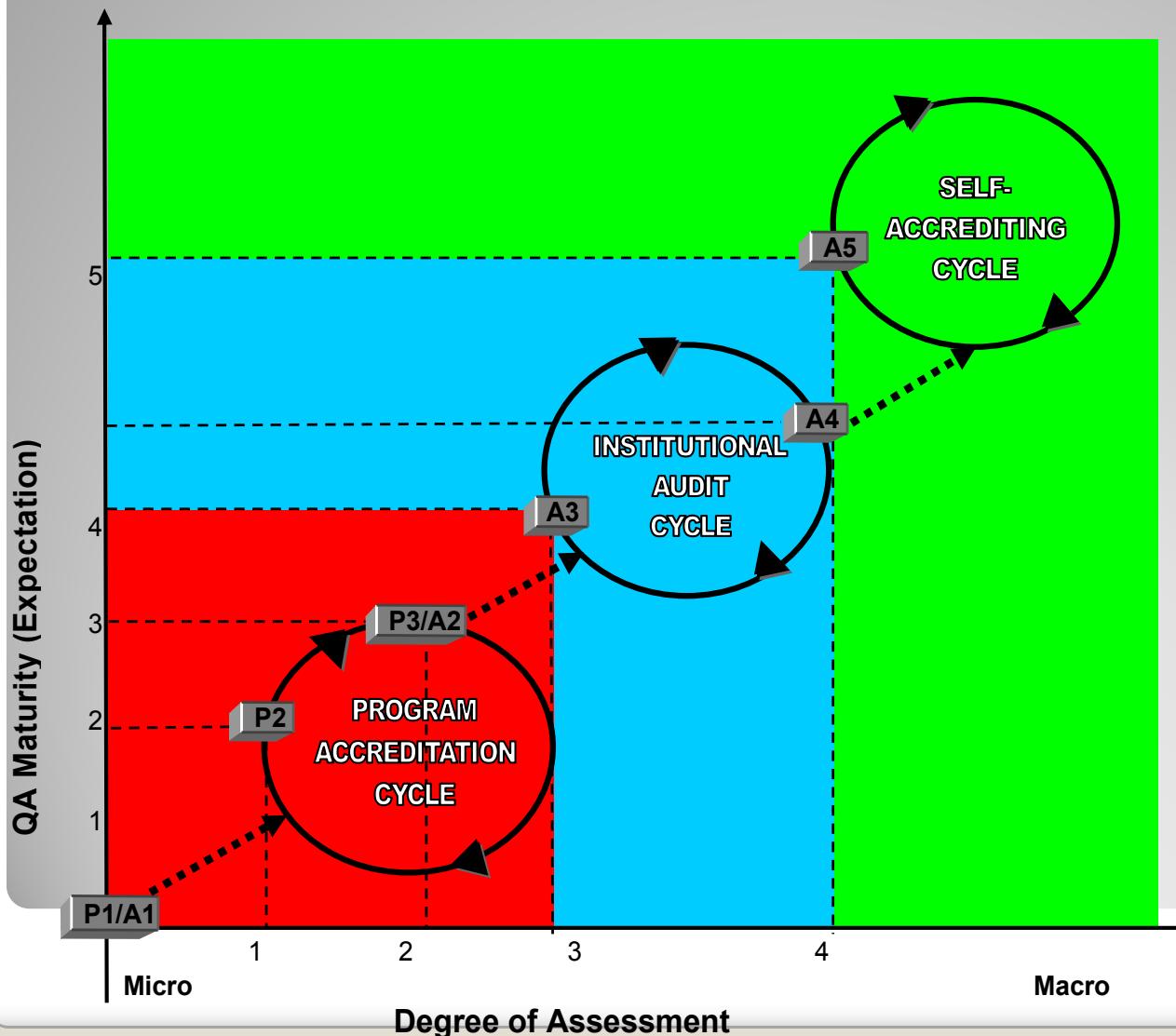
<http://www.apqn.org/membership/members/>

COUNTRY	ACADEMIC QUALITY AGENCY	
U.K.	QAA	The Quality Assurance Agency for Higher Education
Australia	AUQA	Australian Universities Quality Agency
New Zealand	NZQA	New Zealand Qualifications Authority
German	ENQA	German Accreditation Council
Philippines	PAASCU	Philippine Accrediting Association of Schools, Colleges and Uni.
Japan	JUAA	Japan University Accreditation Association
China	HEEC	Higher Education Evaluation Centre
Thailand	ONESQA	The Office for National Edu. Standards and Quality Assessment
Europe	ECA	The European Consortium for Accreditation
Russia	NAA	National Accreditation Agency of the Russian Federation
U.S.A.	CHEA	Council for Higher Education Accreditation
Ireland	NQAI	National Qualifications Authority of Ireland
Israel	CHEI	Council for Higher Education in Israel
Netherlands	NVAO	Accreditation Organisation of the Netherlands and Flanders
Africa	SAQA	South African Qualifications Authority
Mauritius	MQA	Mauritius Qualification Authority
Hong Kong	HKCAAVQ	Hong Kong Council for Accreditation of Academic and Voc. Qualifications

## **Malaysian Qualification Agency (MQA) and the Implementation of the Malaysian Qualifications Framework (MQF)**

- Basis for quality assurance of higher education
- Reference point for the criteria and standards for national qualifications
- Responsible for monitoring and overseeing the quality assurance practices and accreditation of national higher education
- Responsible towards developing standards and credits and all other relevant instruments as national references for the conferment of awards
- Facilitate the recognition and articulation of qualifications.

# MQA HEQA MODEL



**A1** Institutional Audit (Provisional)  
**A2** Institutional Audit (Accreditation)  
**A3** Institutional Audit (Compliance)  
**A4** Institutional Audit (Self-Accreditation)  
**A5** Institutional Audit (Surveillance)

**P1** Provisional Accreditation  
**P2** Program Monitoring  
**P3** Program Accreditation

## **Programme Accreditation**

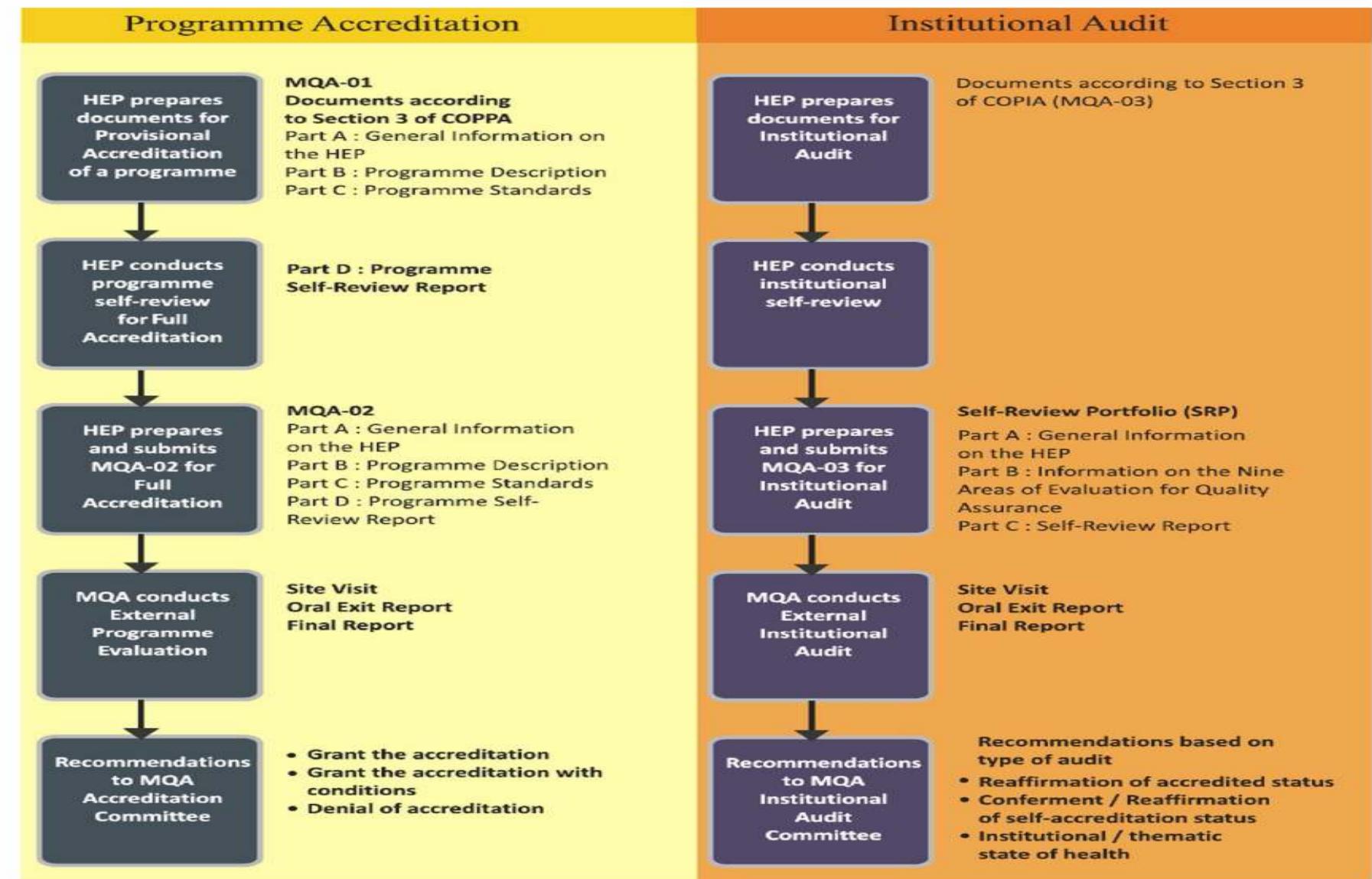
### i) **Provisional Accreditation (PA)**

Provisional Accreditation is an exercise to determine whether a programme has met the **minimum quality requirements** preliminary to full accreditation

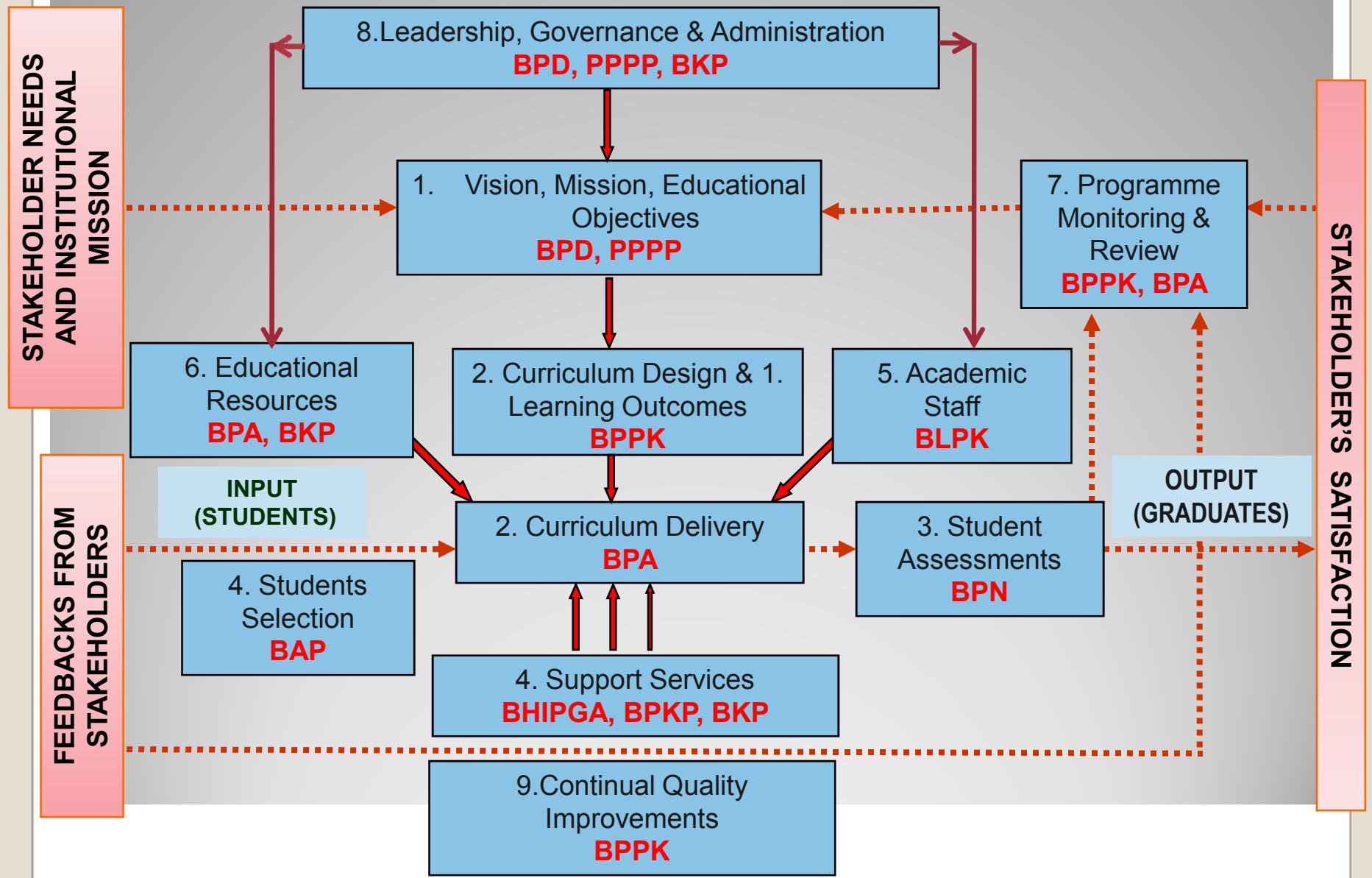
### ii) **Full Accreditation (FA)**

Full Accreditation is an assessment exercise to ascertain that a programme provided by a higher education provider has met the **quality standards and in compliance** with the Malaysian Qualifications Framework.

## General Comparison of Programme Accreditation and Institutional Audit Process

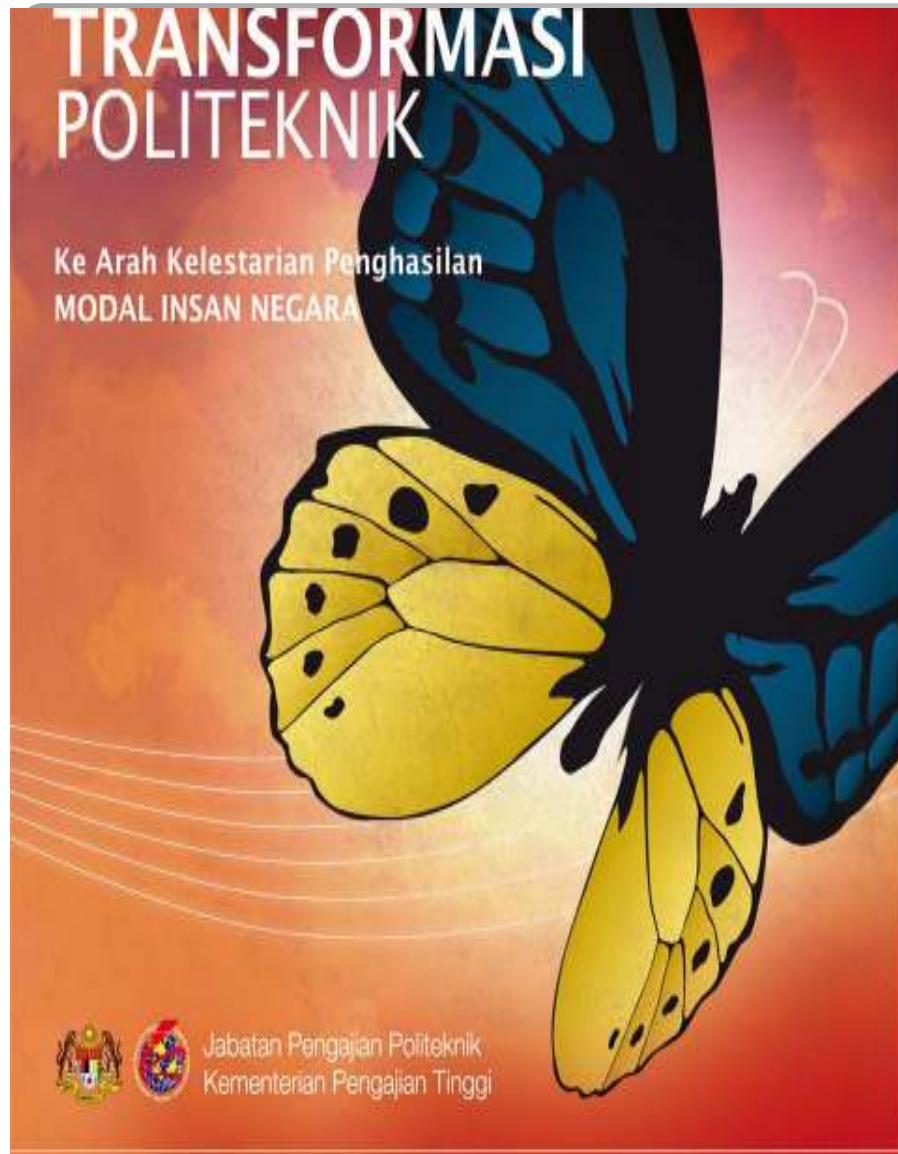


# MQA Code of Practice – DPE's Organizational Structure



<b>INSTITUTION</b>	<b>ACADEMIC QA BODY</b>
UM	Quality Management and Enhancement Centre (QMEC)
UKM	Pusat Pembangunan Akademik
UPM	Bahagian Perancangan Korporat
UPSI	Bahagian Pembangunan Akademik dan Kualiti
UUM	Institut Pengurusan Kualiti
UMS	Pusat Perkembangan Akademik
UiTM	The Institute of Education Development (InED)
USM	Bahagian Hal Ehwal Akademik dan Antarabangsa

# POLYTECHNICS' TRANSFORMATIONAL PLAN



Three meaningful key performance indicators to be achieved under the strategic plan:

- At least one polytechnic will be recognized as the leader of TVET in the Asia-Pacific region
- 85% of polytechnic graduates will be employed within six months upon completion of their program
- 50% of qualified Sijil Pelajaran Malaysia holders choose polytechnic as their preferred choice of tertiary education

# **FASA PELAKSANAAN TRANSFORMASI POLITEKNIK (2020)**



Outcome 1: Polytechnic as the preferred institution  
Outcome 2: Employable / Entrepreneurial Graduates  
Outcome 3: Positive perception of polytechnic education



Polytechnic University

Self Accreditation (MQA)

International Students

Hands-On Degree Programs

100% Diploma Programs in Polytechnics

Polytechnic Act

Industrial Collaboration in Applied Research

Curriculum Development Center

2012

Articulation Program with HLI's

Twinning Program

Premier Polytechnic

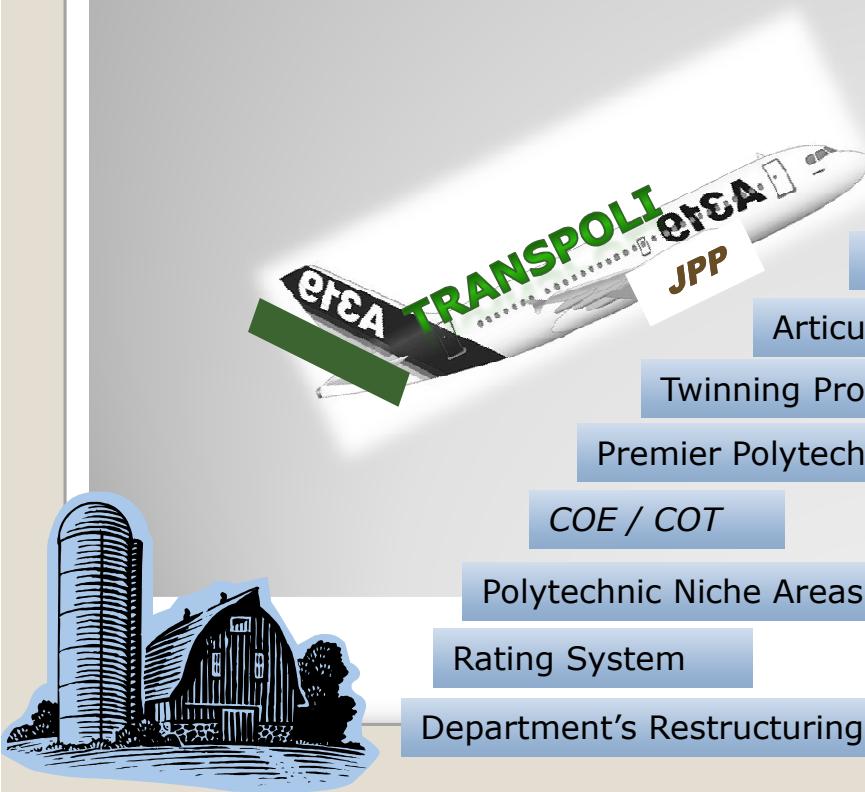
COE / COT

Polytechnic Niche Areas

Rating System

Department's Restructuring

2010

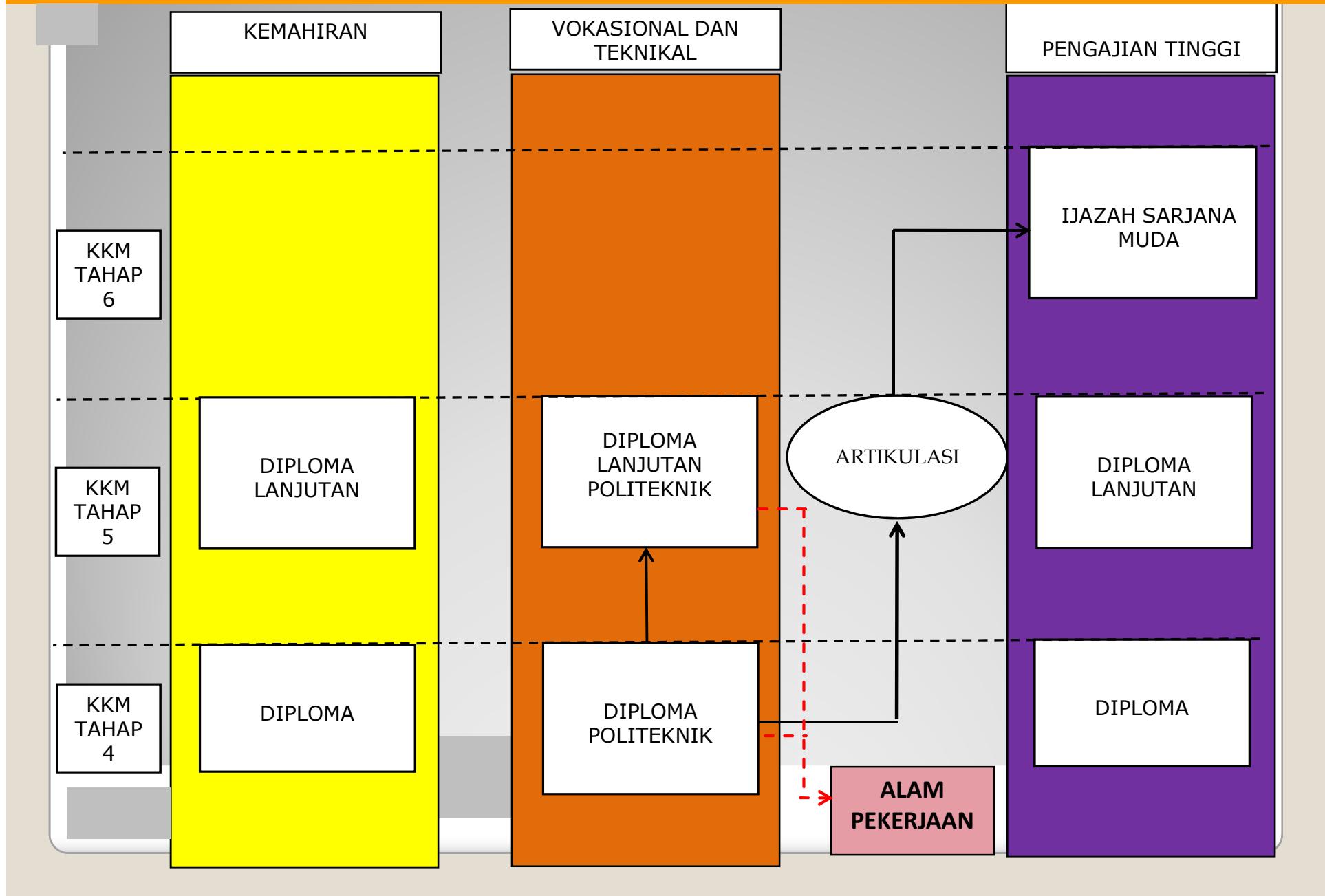


## **Dimension**

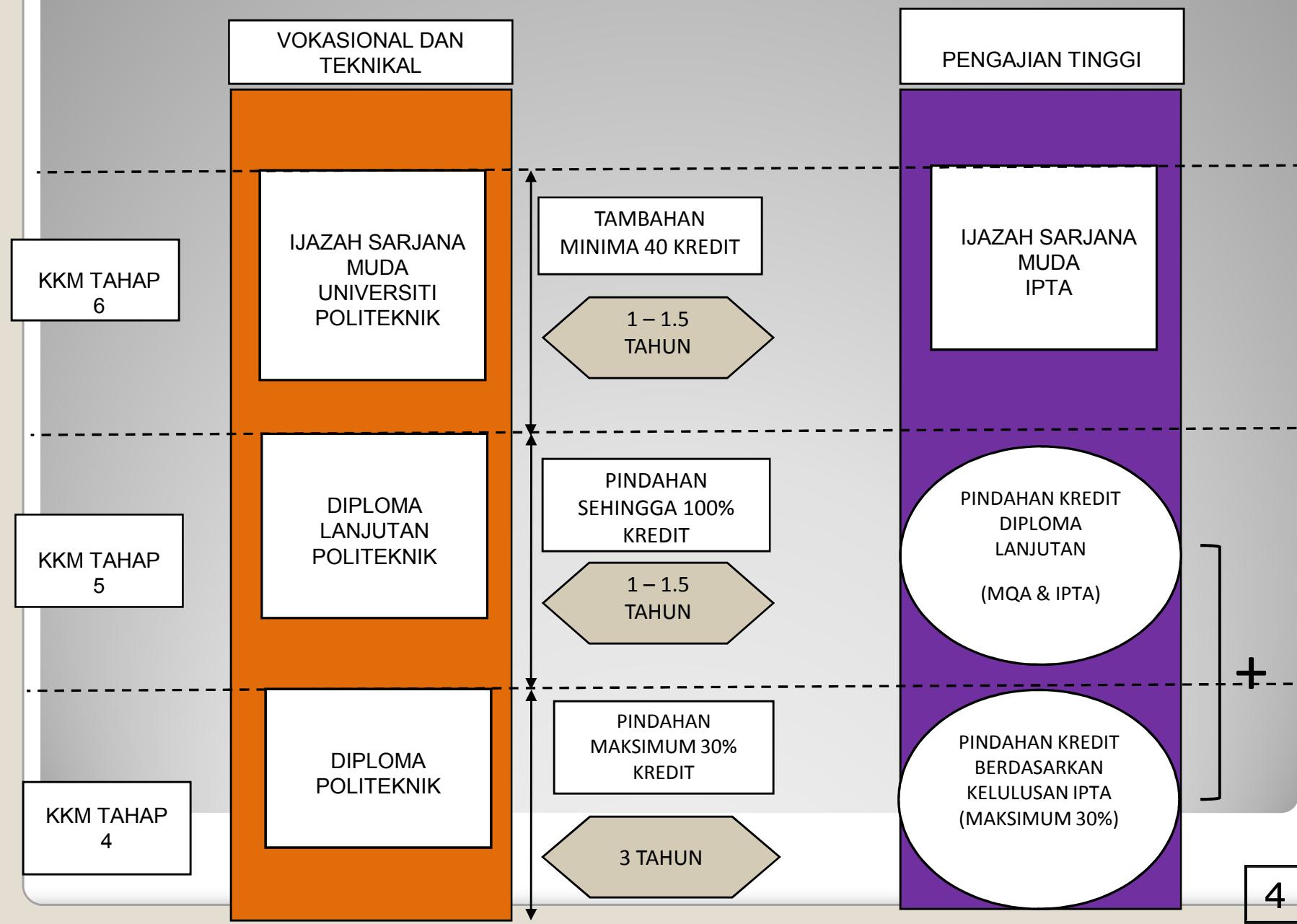
- Student** ➤ **Areas 2, 3 & 4**
- Human Resource** ➤ **Areas 5**
- Programme** ➤ **Areas 2, 3, 6, 7**
- Institution, Structure & Governance** ➤ **Areas 1, 8, 9**
- Industry Linkage** ➤ **Areas 2, 6,**

## **MQA's Criteria for Accreditation**

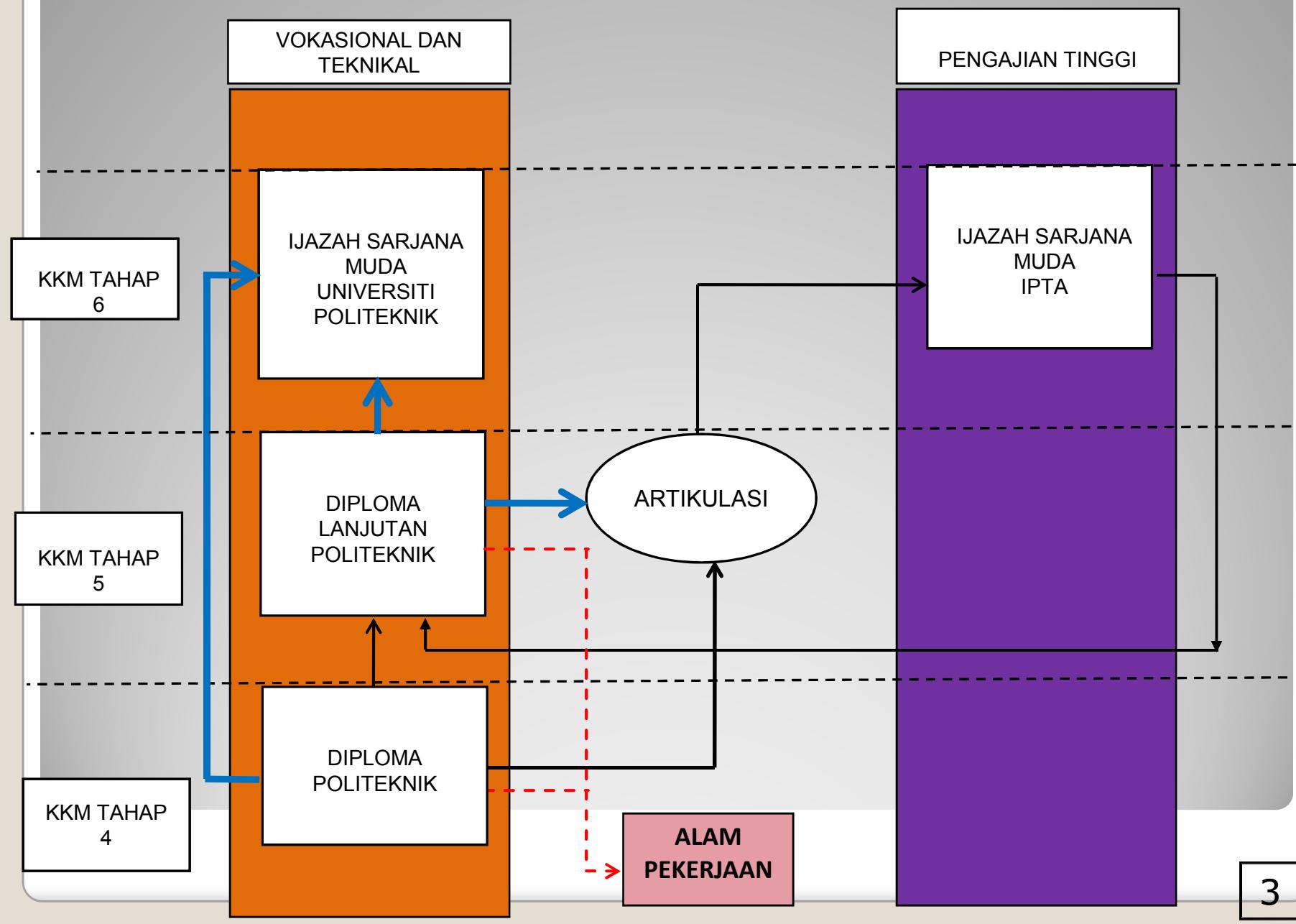
# KERANGKA KELAYAKAN MALAYSIA (SEMASA)



## CADANGAN PINDAHAN KREDIT PROGRAM PENGAJIAN POLITEKNIK



## CADANGAN LALUAN DAN ARTIKULASI PROGRAM PENGAJIAN POLITEKNIK



# Senarai Program Diploma: Jumlah 200

JABATAN	NAMA PROGRAM		KOD PROGRAM	BIL. POLITEKNIK YANG MENAWARKAN
JKA	1.	Kejuruteraan Awam	DKA	15
	2.	Kejuruteraan Perkhidmatan Bangunan	DPB	1
	3.	Teknologi Berasaskan Kayu	DBK	2
	4.	Perancangan Bandar & Wilayah	DPW	1
	5.	Seni Bina	DSB	4
	6.	Ukur Bahan	DUB	2
	7.	Ukur Tanah	DUT	2
	8.	Kejuruteraan Alam Sekitar	DAS	1
JKE	9.	Kejuruteraan Elektrik	DET	6
	10.	Kejuruteraan Elektronik	DKE	16
	11.	Kejuruteraan Elektronik (Kawalan)	DJK	2
	12.	Kejuruteraan Elektronik (Komputer)	DTK	10
	13.	Kejuruteraan Elektronik (Perubatan)	DEU	1
	14.	Kejuruteraan Elektronik (Optoelektronik)	DEO	1
JKM	15.	Kejuruteraan Mekanikal	DKM	15
	15.	Kejuruteraan Mekanikal (Automotif)	DAD	7
	17.	Kejuruteraan Mekanikal (Loji)	DJL	2
	18.	Kejuruteraan Mekanikal (Pembuatan)	DTP	10
	19.	Kejuruteraan Mekanikal (Penyamanan Udara & Penyejukbekuan)	DPU	2
	20.	Kejuruteraan Mekanikal (Pertanian)	DPT	1
	21.	Kejuruteraan Mekanikal (Pembungkusan)	DMP	1
	22.	Kejuruteraan Mekanikal (Plastik)	DMK	2
	23.	Kejuruteraan Mekanikal (Tekstil)	DMT	1
	24.	Kejuruteraan Mekanikal (Bahan)	DMB	1
	25.	Kejuruteraan Mekatronik	DEM	10
	26.	Aircraft Maintenance	DAM	1

JABATAN		NAMA PROGRAM	KOD PROGRAM	BIL. POLITEKNIK YANG MENAWARKAN
Jab. Kej. Perkapalan	27.	Kejuruteraan Perkapalan	DKP	1
Jab. Tek.Makanan	28.	Teknologi Makanan	DTM	1
Jabatan Perdagangan	29.	Akauntansi	DAT	13
	30.	Insurans	DIN	1
	31.	Kewangan dan Perbankan	DKB	1
	32.	Pemasaran	DPR	8
	33.	Pengajian Perniagaan (Pengurusan)	DPM	8
	34.	Pengajian Perniagaan (Perniagaan Antarabangsa)	DPI	1
	35.	Sains Kesetiausahaan	DSK	5
	36.	Pengurusan Peruncitan	DRM	2
	37.	Pengajian Perniagaan (e-commerce)	DEC	2
	38.	Pengurusan Logistik & Rangkaian Bekalan	DLS	2
Jabatan Hospitaliti	39.	Kewangan dan Perbankan Islam b	DIB	3
	40.	Pengurusan Hotel dan Katering	DHK	5
Jabatan Rekabentuk & Komunikasi Visual	41.	Pengurusan Pelancongan	DUP	6
	42.	Rekabentuk Grafik	DRG	1
	43.	Rekabentuk Fesyen & Pakaian	DFP	1
	44.	Rekabentuk Industri	DRI	1
	45.	Media Digital (Video dan Pengajian Filem)	DVF	1
Jabatan Teknologi Maklumat	46.	Media Digital (Seni Digital)	DDA	1
	47.	Teknologi Maklumat (Pengaturcaraan)	DIP	11
	48.	Teknologi Maklumat (Rangkaian)	DNS	6
Jab. Agrotek. & Asas Tani	49.	Teknologi Maklumat (Hiburan Digital)	DIH	1
	50.	Bioteknologi		1

PELAN TINDAKAN  
KE ARAH MENCAPAI FA  
BAGI SEMUA PROGRAM DI POLITEKNIK



## POLYTECHNICS' INITIATIVES TOWARDS QUALITY IN EDUCATION - POST EFFORTS AND CURRENT INITIATIVES

PURPOSE	ACTIVITIES	YEAR
Buying In	<ul style="list-style-type: none"> <li>• Continuous trainings and workshops on areas as follows:           <ul style="list-style-type: none"> <li>- QA principles and practices</li> <li>- Continuous Quality Improvements</li> </ul> </li> <li>• Benchmarking visits to establish best practices that can be adopted within the polytechnics' system</li> </ul>	2007 - 2010 2008 - 2010
Capacity Building (Phase 1)	<ul style="list-style-type: none"> <li>• Development and launching of Polytechnics' Competency Standards</li> <li>• Development of template for curriculum development process including definition of PAI, PLO, CLO, GO and SO.</li> <li>• Development of mock MQA 01 documentation for practice purposes</li> <li>• Restructuring of DPE and Polytechnic to include QA division/unit</li> </ul>	2008 2007-2010 2009 2010

## POLYTECHNICS' INITIATIVES TOWARDS QUALITY IN EDUCATION - POST EFFORTS AND CURRENT INITIATIVES

<b>PURPOSE</b>	<b>ACTIVITIES</b>	<b>YEAR</b>
Capacity Building (Phase 1)	<ul style="list-style-type: none"> <li>• Realigning of DPE's MS ISO 9001:2008 certification by Llyods Register Quality Assurance with its scope of "Curriculum Design, Development, Review and Monitoring" to include MQA's code of practices</li> <li>• Realigning of all polytechnics' MS ISO 9001:2008 certification to include MQA's code of practices</li> <li>• Establishment of joint Technical Committee with representatives of MQA with scheduled discussions on polytechnics' QA practices and procedures</li> <li>• Continuous trainings and workshops on areas as follows : <ul style="list-style-type: none"> <li>- Outcome Based Education (OBE) principles</li> <li>- Constructive alignment of curriculum, instruction and assessment</li> <li>- MQA's requirements on all 9 areas to be audited</li> </ul> </li> </ul>	2010 2010 2010 2010

## **POLYTECHNICS' INITIATIVES TOWARDS QUALITY IN EDUCATION - POST EFFORTS AND CURRENT INITIATIVES**

<b>PURPOSE</b>	<b>ACTIVITIES</b>	<b>YEAR</b>
Capacity Building (Phase 2)	<p>Continuous trainings and workshops on areas as follows:</p> <ul style="list-style-type: none"> <li>- Development of Internal Auditing Instruments</li> <li>- Internal Auditing Procedures and Practices</li> <li>- Development of Self Review Report</li> <li>- Development of MQA 02 documentation</li> </ul>	2010 - 2011
Developing Communication Tool	<p>Development of Curriculum Information and Document Online System (CIDOS) as a platform for the purpose of collaboration and communication between Curriculum Development Evaluation Division, curriculum development committee, polytechnics lecturers and polytechnics students.</p>	2007

## POLYTECHNICS' INITIATIVES TOWARDS QUALITY IN EDUCATION - POST EFFORTS AND CURRENT INITIATIVES

PURPOSE	ACTIVITIES	YEAR
Outcome-Based Curriculum	<ul style="list-style-type: none"> <li>• Reviewing of all curriculum towards OBE compliance</li> <li>• Constructive Alignment of curriculum, instruction and assessment</li> </ul>	2008 - 2010 2008 - 2010
Outcome-Based Delivery	<ul style="list-style-type: none"> <li>• Reassessing of instructional auditing procedures to suit the requirements of MQA</li> </ul>	Begins in 2010
Outcome-Based Assessments	<ul style="list-style-type: none"> <li>• Reassessing of assessment procedures, practices and auditing mechanism to suit the requirements of MQA</li> <li>• Development of Assessments Specifications Table (<i>Jadual Spesifikasi Pentaksiran</i>), Tests Specifications Table (<i>Jadual Spesifikasi Ujian</i>) and Items Specifications Table (<i>Jadual Spesifikasi Item</i>) – towards strengthening assessment practices to suit the requirements of MQA</li> </ul>	Begins in 2010  2010

## **POLYTECHNICS' INITIATIVES TOWARDS QUALITY IN EDUCATION - POST EFFORTS AND CURRENT INITIATIVES**

<b>PURPOSE</b>	<b>ACTIVITIES</b>	<b>YEAR</b>
Continuous Quality Improvement (CQI)	<ul style="list-style-type: none"><li>• Establish audit and feedback mechanism to ensure all procedures and processes are in line with best practices at reputable educational institutions</li><li>• Continuous promulgation of best practices amongst DEP and polytechnics staffs</li></ul>	Begins in 2010

Development of a 'quality culture' to underpin a successful quality system requires the following:

- An open and active commitment to quality at all levels
- A willingness to engage in self-evaluation
- A firm regulatory framework; clarity and consistency of procedures
- Explicit responsibilities for quality control and quality assurance
- An emphasis on obtaining feedback, from a range of constituencies
- A clear commitment to identifying and disseminating good practice
- Prompt, appropriate, and sensitive managerial action to redress problems, supported by adequate information

Newton J. (2007)

# TERIMA KASIH

