







"TVET Collaboration Hub"

Ts. Zainab Ahmad

Director General
Department of Polytechnic
and Community College Education
(DPCCE), Ministry of Higher Education



CONTENTS

DPCCE at a glance

Digitalization – A Valuable Proposition

Programmes Mapping To MIDA Priority Areas

Introduction to National TVET Council

National TVET Provider Landscape

Strategic thrusts and key initiatives

TVET Collaboration Hub

Potential collaboration

Potential TVET Hubs



DPCCE AT A GLANCE

ACCREDITED PROGRAMME

133

MQA 452

	POLITEKNIK 36	KOLEJ KOMUNITI M A L A Y S I A	
	30	104	TOTAL
STAFF	9,861	3,989	14,216
ENROLMENT (as of Sept 2020)	86,466	16,324	102,790
PROGRAMME OFFERED	90	67	157
GE (Interim Data 2020)	91.4%	94.3%	
LIFELONG LEARNING (LLL)	24,442 (Involvement) 534 (Programme)	112,168 (Involvement) 6,696 (Programme)	136,590 (Involvement) 7,230 (Programme)

Data until 9 Dec 2020

Data until 30 Nov 2020

DIGITALIZATION - A VALUABLE PROPOSOTION



Streamline Digitization processes **Automate** processes **Organize** information **Digitize** information

Digitalization Using digital technologies

Digitalization

and information to transform individual institutional operations.

Digital transformation

Transform the institution

Digital transformation

A series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution's operations, strategic directions, and value proposition.











Changing from analog or physical to digital form.

Digitization



Manufacturing

- · Provides sustainable competitive advantages
- · Supports volatile business and product
- · Enables smart factories and automation

Healthcare

- · Supports growing consumer interest in wellbeing
- Counters increasing costs of healthcare
- · Enables safer patient data storage

Financial Services

- Supports disruption from fintech terms
- · Enables online/mobile transactions and customized financial solutions

Public Safety

- · Supports growing video surveillance and wearable cameras
- · Defence against cyber attacks

Energy & Utilities

- · Supports electrification and renewable energy generation
- · Enables de-centralized business models

Impact of 4IR on new Technologies



PROGRAMMES MAPPING TO MIDA PRIORITY AREAS

Life Sciences and **Medical Technology**

Bachelor of Electronic **Engineering Technology** (Medical Electronics) with Honours

Machinery & Metal

Diploma in Mechanical Engineering (Automotive)

Bachelor of Manufacturing Engineering Technology (Automotive Design) with Honours

Creative Industries

Diploma in Creative **Animation**

Diploma in Digital Arts

Life Sciences and **Bio-Industry**

Diploma in Biotechnology

Business Services (Distributive Trade/-**Professional** Services/Wealth Management/ Logistics)

> Diploma in Retail Management

Diploma in Accountancy

Diploma in Islamic Banking and Finance

Diploma in Logistics and Supply Chain Management

Diploma in Insurance

Green Technology

Diploma in Electrical **Engineering (Green Energy)**

Diploma in Photovoltan **Technology**

Oil & Gas

Diploma in Process Engineering (Petrochemical)

Diploma in Chemical Engineering

Design Industries

Diploma in Industrial **Technology**

Diploma in

Drone Technology and **Robotic Cultivation**

Diploma in Agrotechnology

Graphic Design

Education Services -ICT

Diploma In Information **Technology** (Digital Technology)

- Track: Software and **Application Development**

- Track: Networking **Systems**

- Track: Information Security

- Track: Games Technology

Machinery and **Equipment**

Diploma in Electronic **Engineering (Control)**

Diploma in Electronic **Technology** (Instrumentation)

Building and **Technology**

Diploma in Architectural **Technology**

Bachelor of Civil Engineering Technology

Hospitality (Hotel and Tourism)

Diploma in Tourism Management Diploma in Hotel Management Certificate in Hotel **Operations**

Aquaculture, **Breeding and** Harvest **Technology**

Diploma in Aquaculture Certificate in Aquaculture

14 **AREAS**

31 **PROGRAMMES AND MORE**

34 INDUSTRY-DRIVEN COURSES



18 December 2020

The Cabinet acknowledged the establishment of MTVET through the Cabinet Memorandum

11 February 2021

MTVET Meeting No.1/2021

Propose key strategies and initiatives for National TVET Empowerment Agenda



What is MTVET?

The highest decision-making body related to the direction of TVET

Responsible in improving the coordination of TVET ecosystem through public and private stakeholders' involvements

A platform for the government to empower TVET in developing highly skilled human resource to meet the needs of the industry

Why do we need MTVET?

MTVET ASPIRATIONS

Efforts to mainstream TVET empowerment agenda are implemented in a more coordinated manner from the following perspectives:

NATION

Achieve the vision of becoming a developed country in tandem with Industry4wrd policy and WKB 2030 aspirations

INDUSTRY

Develop
competent
TVET human
resource in
consistent with
industry's needs

TVET GRADUATE

Support
employability
and job
creation
agenda among
graduates

INSTITUTION AND TVET PROVIDERS

Receive
supporting
resources to
produce TVET
graduates who
meet the
demands of
the industry

NATIONAL TVET PROVIDER LANDSCAPE

11 MINISTRIES

640 PUBLIC TVET INSTITUTIONS

22 STATE GOVERNMENT TVET INSTITUTIONS

633 PRIVATE TVET INSTITUTIONS

MINISTRY OF EDUCATION

Kolej Vokasional (87)

87

MINISTRY OF HIGHER EDUCATION

MTUN (4) Politeknik (36) Kolej Komuniti (104)

144

MINISTRY OF WORKS

Akademik Binaan Malaysia (11)

11

MINISTRY OF RURAL DEVELOPMENT

KEMAS (2) Kolej KEDA (1) PERDA – TECH (1)

MARA: MJII (1) IKM (14)

KKTM (10)

Giat MARA (231)

UNIKL (13)

GMI (1)

274

MINISTRY OF HUMAN RESOURCES

ILP (23) ADTEC (8) JMTI (1) CIAST (1)

MINISTRY OF YOUTH AND SPORTS

IKTBN (8) IKBN (13) AKBG (1)

MINISTRY OF AGRICULTURE AND FOOD INDUSTRIES

Institut Latihan Pertanian (15)

15

33

MINISTRY OF WOMEN, FAMILY AND COMMUNITY DEVELOPMENT

PLPP (1) Bengkel Daya (2)

MINISTRY OF DEFENCE

PERHEBAT (1)

MINISTRY OF HOME AFFAIRS

Cure and Care Vocational Center (1) Pusat Vokasional Industri (41) Pusat Latihan Kemahiran Kem (6)

48

MINISTRY OF TOURISM, ARTS AND CULTURE

ASWARA (1) Institut Kraf Negara (1) INSTITUTIONS 늡 GOVERMENT

STATE

22

PRIVATE SKILLS
TRAINING
INSTITUTIONS

PRIVATE HIGHER EDUCATION INSTITUTIONS

633

1295 TVET INSTITUTIONS-

Three (3) TVET Strategic Thrusts

Integrated and coordinated governance

Industry-Driven TVET

TVET shaping the future



Establishing TVET programme policies

Creating the National TVET Branding Plan

Formulating sustainable financing models



Developing policies to encourage industry participation



TVET COLLABORATION HUB

Key Principles

Industry Driven – Responsive to the Economy

Preparation for a highly skilled workforce

Collaboration across
Ministries and Agencies
(Public, Private and
State-Run TVET
Institutions)

Leverage on Digital
Technologies and
Social Media

Supportive Governance Policies and Procedures

Empowering Lifelong Learning

TVET Hub-and-Spoke Model

MTVET to develop a framework on how to select Hubs and Spokes. The general characteristics of Hubs and Spokes are as follows:

Hubs: High-performing TVET Institutions which can be considered Centre of Excellence (CoE) due to their size and past performance records as well as have programme(s) which are relevant to local Industry requirements.

Spokes: Smaller TVET Institutions that focus primarily on delivering similar TVET programmes as Hubs within the same region.
These TVET Institutions may also be relatively further away from key Industry players or other
TVET institutions, thus limiting their ability to drive collaboration.



POTENTIAL COLLABORATION

Local industry players supplying machinery or equipment

TVET students working on specialised equipment at industry's facilities (i.e. at the company's premises) during off-peak hours

Industry practitioners teaching
TVET students on selected
modules/subjects as a
visiting instructor

Industry players giving
feedback and input on
programme curriculum structure/
content/skills standards

Offer of apprenticeship placement to TVET students

Offer TVET instructors placements for industry attachment

Industry players giving active feedback to TVET Institutions at every touchpoint event



POTENTIAL TVET HUBS



Politeknik Sultan Salahuddin Abd Aziz Shah on Medical Electronics







ADTEC Shah Alam on Automotive Manufacturing



Centre of Skill Excellence CoSE) on Manufacturing / Mechatronic









Giat Mara Simpang Ampat on Automotive







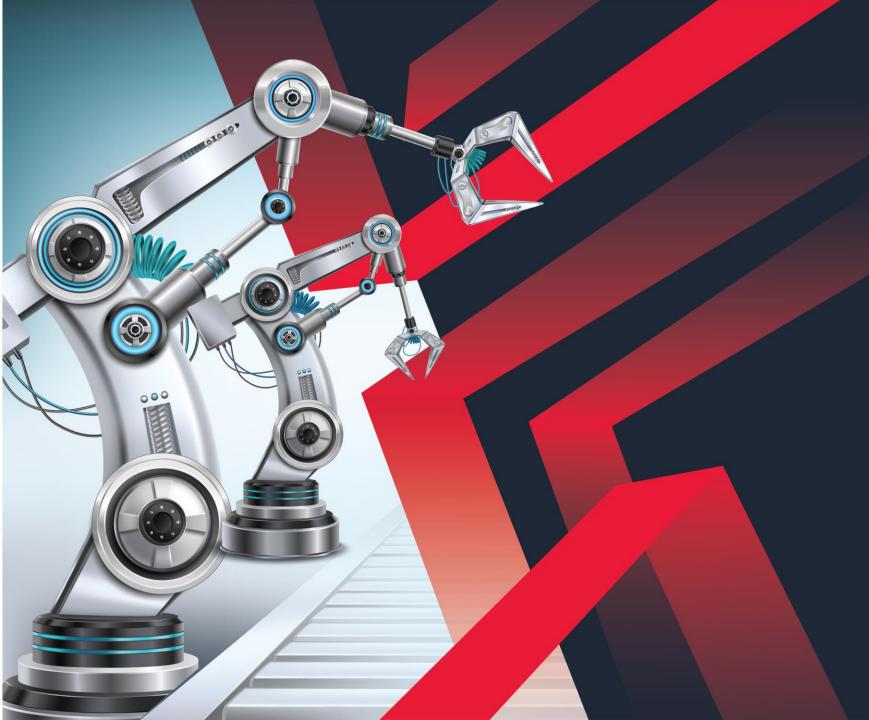




Kolej Komuniti Bandar Penawar on Oil and Gas at Pengerang, Johor

Politeknik Mersing on Cyber Security

Kolej Komuniti Kepala Batas on Electric Vehicle Maintenance



Thank You

Sekretariat MTVET Bahagian Kolaborasi TVET Jabatan Pendidikan Politeknik dan Kolej Komuniti Kementerian Pengajian Tinggi