



INDUSTRY MODE

2u2i

Work-Integrated Education

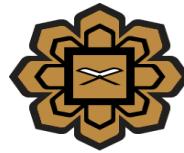
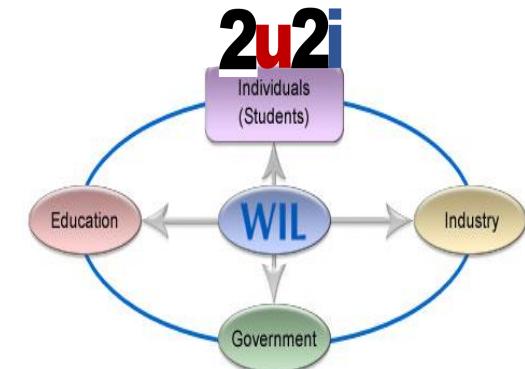


GARIS PANDUAN
PELAKSANAAN MOD PENGAJIAN

2u2i
SOARING UPWARDS
MAKING LEARNING BETTER



Training and Workshop on 2u2i Mode of Study & Work- Based Learning (WBL)



(Company No. 101067-P)

الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
بُونِيْسِيَّتِي إِسْلَامِ إِبْتَارًا بِعَصِيَّا مِلِيْسِيَّا

Garden of Knowledge and Virtue

20 – 21 August 2019

PROF DR HJ MOHAMAD ABDULLAH HEMDI



جامعة تكنولوجيا مارا
UNIVERSITI
TEKNOLOGI
MARA

MQA COURSE CGP-WBL | August 15, 2019

MALAYSIAN QUALIFICATIONS AGENCY (MQA)

GUIDELINES TO
GOOD PRACTICES:
WORK BASED
LEARNING
(GGP: WBL)



Prof Dr. Hj. Mohamad Abdullah Hemdi (DON)

MQA Accreditation Committee Members (MJA)

(Social Science, Arts, and Humanities Cluster)

Chairman

2u2i Strategic & Initiative Committee (MOE/JPT)

Deputy Chairman

Implementaion Guidelines for 2u2i Mode of Study (Garis Panduan Pelaksanaan Mod Pengajian 2u2i)

Chairman

Guidelines to Good Practices: Work-Based Learning (GGP:WBL) Panel EXPerts

Chairman

Program Standard for Hospitality and Tourism Review Committee Members (2nd Edition)

Panel Expert Members

Code of Practice for TVET (Technical, Vocational, Education and Training) Program Accreditation

Lead Assessor

Hospitality and Tourism Management

Dean (2012 – 2018)

Faculty oF Hotel and Tourism Management
Universiti Teknologi MARA Selangor

Deputy Rector (2007 – 2012)

Academic and International Affairs
Universiti Teknologi MARA Pulau Pinang



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MARA

OBJECTIVE OF THE TRAINING PROGRAMME

- To educate Higher Education Provider (HEP) on 2u2i mode of study and WBL; and**
- To equip HEP with the knowledge required in assessing 2u2i mode of study and WBL for accreditation purposes.**

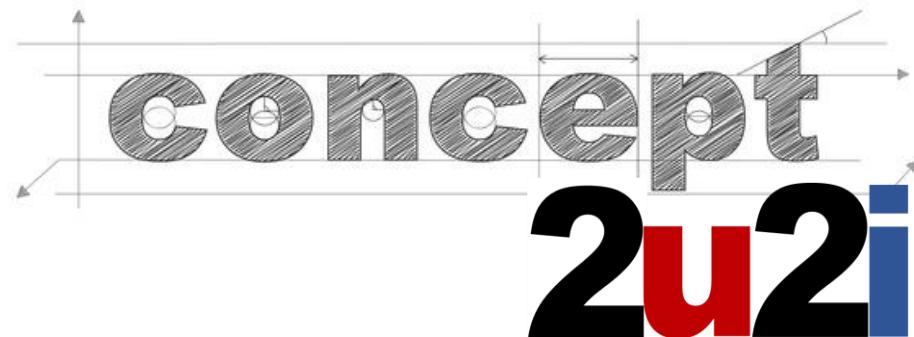
LEARNING OUTCOMES

At the end of the workshop, all participants will be able to:

- Explain the concepts and the benefits of 2u2i mode of study;
- Explain the structure of 2u2i mode of study;
- Explain the delivery method of 2u2i mode of study;
- Use the industry component assessment for report writing;
- Explain the management and the programme design of 2u2i mode of study; and
- Explain the quality assurance of 2u2i mode of study.

CHAPTER 1: INTRODUCTION TO 2U2I &WBL

- Why 2u2i and WBL?
- What is 2u2i and WBL?
- Concept of 2u2i
- Benefits of 2u2i and WBL
- Aims and Learning Outcomes of 2u2i and WBL
- Definition of industry



LONJAKAN

#1

**GRADUAN
HOLISTIK, BERCIRI
KEUSAHAWANAN
& SEIMBANG**



MALAYSIAN EDUCATION BLUEPRINT (HIGHER EDUCATION)



10 Shifts
to support the
attainment of
System and Student
Aspiration

SHIFT#1
**Holistic,
Entrepreneurial And
Balanced
Graduates**

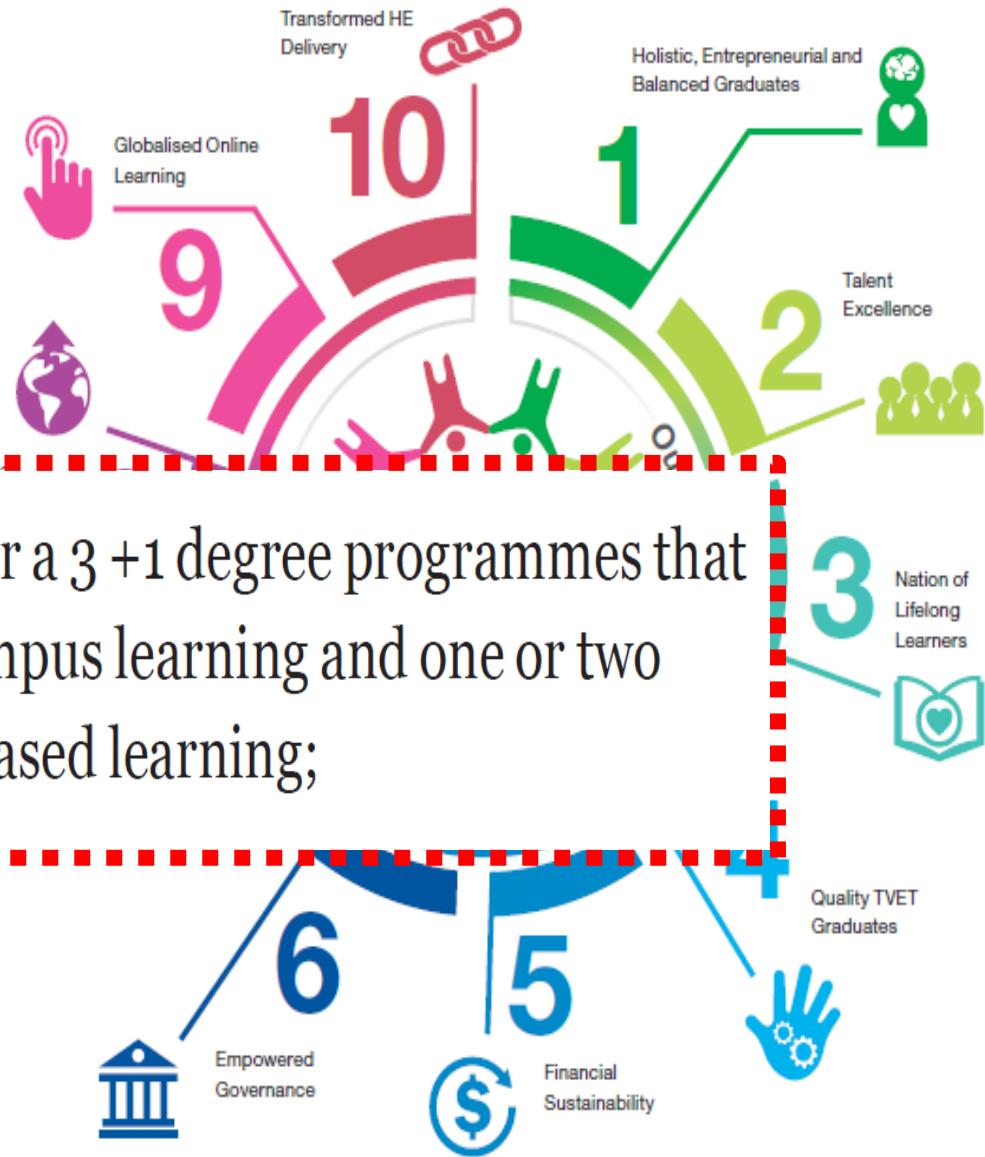


Holistic, Entrepreneurial and Balanced Graduates

Initiative A1

Enhancing curriculum

- Introducing undergraduate 2+2 or a 3 +1 degree programmes that entail two or three years of on-campus learning and one or two years of off-campus or industry-based learning;
- Complementing the MPU Framework by including generic cross curricula courses. Similar but more advanced courses must be instituted at postgraduate levels. Further enhancements modelled after liberal arts curricula in the context of US universities can also be explored by HLIIs; and
- Improving the design of entrepreneurship courses by increasing the practical component of basic entrepreneurship courses, and introducing an entrepreneurship minor in academic programmes.



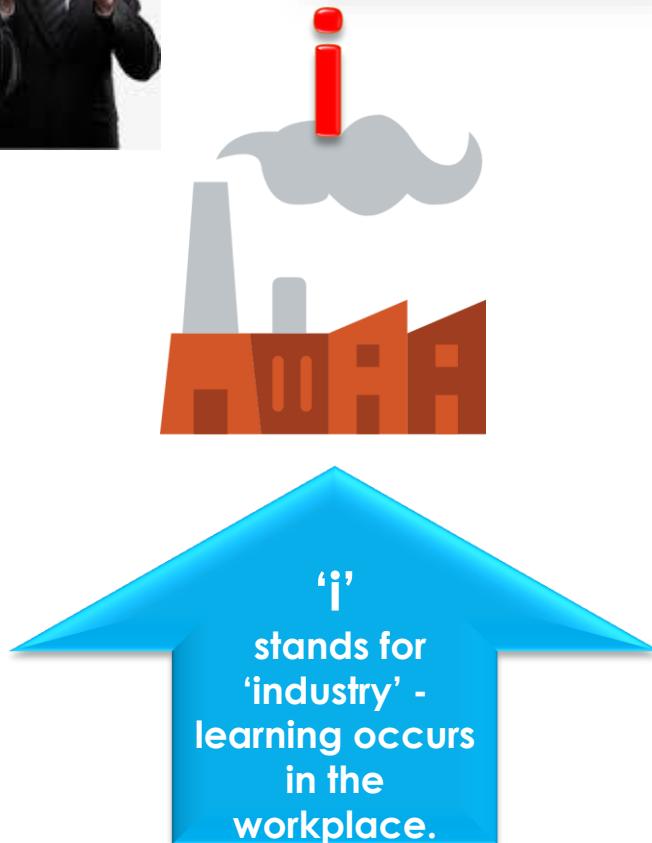
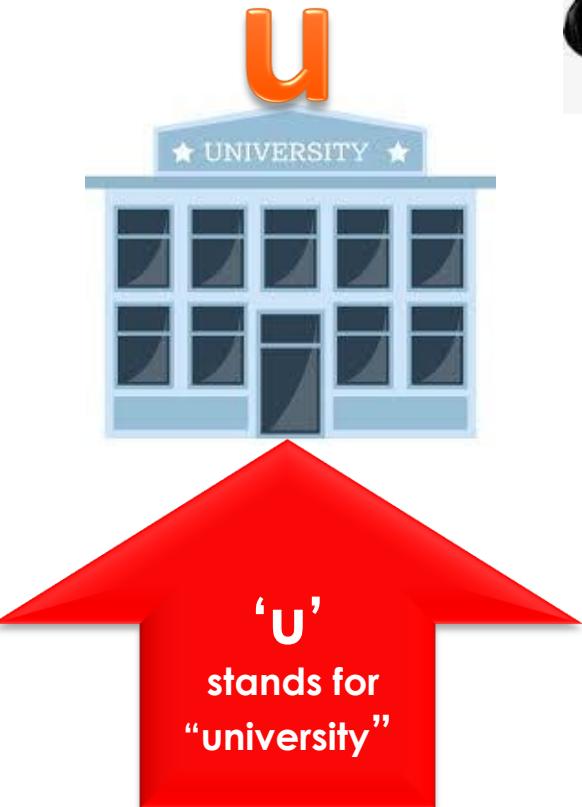
LIST OF 2u2i PROGRAMMES

Bil.	Universiti	Nama Program	Mod Pengajian	Telah Mula Ditawarkan	
				Ya/Tidak	Bermula pada
1	UPM	Bachelor Sains Pengurusan Perladangan	3u1i	Ya	Semester 1, Sesi 2015/2016
2	UMK	Sarjana Muda Keusahawanan dengan Kepujian	2u2i	Ya	Semester 1, Sesi 2016/2017
3	UniSZA	Sarjana Muda Produksi dan Kesihatan Haiwan dengan Kepujian	3u1i	Ya	Semester 1, Sesi 2016/2017
4	UMT	Sarjana Muda Perakaunan	2u2i	Ya	Semester 1, Sesi 2016/2017
5	UTM	Sarjana Muda Sains Komputer (Kejuruteraan Data)	2u2i	Ya	Semester 1, Sesi 2016/2017
6	UniSZA	Sarjana Muda Dietetik dengan Kepujian	3u1i	Ya	Semester 1, Sesi 2017/2018
7	UiTM	Sarjana Muda Filem (Kepujian) Sinematografi	2u1i	Ya	Semester 1, Sesi 2017/2018
8	UiTM	Sarjana Muda Filem (Kepujian) Pengarahan Filem	2u1i	Ya	Semester 1, Sesi 2017/2018
9	UiTM	Sarjana Muda Penulisan (Kepujian) Penulisan Skrin	2u1i	Ya	Semester 1, Sesi 2017/2018
10	UiTM	Sarjana Muda Penulisan (Kepujian) Penulisan Kreatif	2u1i	Ya	Semester 1, Sesi 2017/2018
11	UiTM	Sarjana Muda Pengurusan Industri Kreatif (Kepujian) Pengurusan Seni	2u1i	Ya	Semester 1, Sesi 2017/2018
12	UiTM	Sarjana Muda Animasi (Kepujian) Produksi Animasi 2D	2u1i	Ya	Semester 1, Sesi 2017/2018
13	UiTM	Sarjana Muda Animasi (Kepujian) Produksi Animasi 3D	2u1i	Ya	Semester 1, Sesi 2017/2018
14	UiTM	Sarjana Muda Pengurusan Industri Kreatif (Kepujian) Produksi Filem	2u1i	Ya	Semester 1, Sesi 2017/2018
15	UiTM	Sarjana Muda Teater (Kepujian) Produksi Teater	2u1i	Ya	Semester 1, Sesi 2017/2018
16	UiTM	Sarjana Muda Teater (Kepujian) Sinografi	2u1i	Ya	Semester 1, Sesi 2017/2018
17	UiTM	Sarjana Muda Komunikasi Massa (Kepujian) Penyiaran	2u1i	Ya	Semester 1, Sesi 2017/2018
18	UKM	Sarjana Muda Sains dengan Kepujian (Bioteknologi dengan Pengurusan)	2u2i	Ya	Semester 1, Sesi 2017/2018
19	UKM	Sarjana Muda Sains dengan Kepujian (Oleokimia)	2u2i	Ya	Semester 1, Sesi 2017/2018
20	UKM	Sarjana Muda Sains dengan Kepujian (Bioinformatik)	3u1i	Ya	Semester 1, Sesi 2017/2018
21	UKM	Sarjana Muda Sains dengan Kepujian (Teknologi Kimia)	3u1i	Ya	Semester 1, Sesi 2017/2018
22	UKM	Sarjana Muda Sains dengan Kepujian (Kimia)	3u1i	Ya	Semester 1, Sesi 2017/2018
23	UKM	Sarjana Muda sains dengan Kepujian (Sains Makanan dengan Pengurusan Perniagaan)	3u1i	Ya	Semester 1, Sesi 2017/2018
24	UKM	Sarjana Muda Sains dengan Kepujian (Sains Sekitaran)	3u1i	Ya	Semester 1, Sesi 2017/2018
25	UKM	Sarjana Muda Sains Citra dengan Kepujian	2u2i	Ya	Semester 1, Sesi 2018/2019
26	UTHM	Sarjana Muda Teknologi Kejuruteraan Aeronautik (Penerbangan Profesional) dengan Kepujian	3u1i	Ya	Semester 1, Sesi 2018/2019
27	UTHM	Sarjana Muda Teknologi Kejuruteraan Aeronautik (Penyenggaraan Pesawat Terbang) dengan Kepujian	3u1i	Ya	Semester 1, Sesi 2018/2019
28	UTHM	Sarjana Muda Teknologi Kejuruteraan Pengangkutan Rel dengan Kepujian	3u1i	Ya	Semester 1, Sesi 2018/2019
29	UM	Sarjana Muda Pengajian Media	3u1i	Ya	Semester 1, Sesi 2018/2019
30	UPNM	Sarjana Muda Penerbangan	2u2i	Ya	Semester 1, Sesi 2018/2019

2u2i PROGRAMS

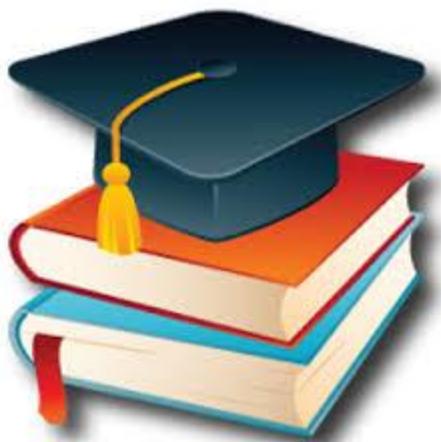
NO	2u2i PROGRAMS	Program Delivery	Institutions
1	Diploma Pengurusan Hotel	Kuliah, Tutorial, WBL	Politeknik Merlimau Melaka
2	Diploma Keusahawanan	Kuliah, Tutorial dan Industri (WBL)	Politeknik Metro Johor Bahru
3	Ijazah Sarjana Muda Keusahawanan dengan Kepujian	Kuliah, Tutorial, Work Based Learning (WBL)	Universiti Malaysia Kelantan
4	Diploma in Restaurant Management	Kuliah, tutorial, amali dan work based learning	Kolej SEGI Subang Jaya
5	Diploma in Restaurant Management	Kuliah, Tutorial, Amali, Latihan Industri, WBL	Kolej SEGI Sarawak
6	Diploma Perkhidmatan Makanan (Amalan Halal)	Kuliah, Tutorial, Amali dan WBL	Politeknik Sultan Idris Shah
7	Diploma Eksekutif Teknologi Kejuruteraan Automasi	Kuliah, Tutorial, Amali dan WBL	Politeknik Sultan Salahuddin Abdul Aziz Shah
8	Diploma in Culinary Arts	Work Based Learning (WBL)	Universiti Nilai
9	Diploma in Hotel Operations	Kuliah, Tutorial, Amali dan Latihan Industri - WBL	Kolej Komuniti Kuantan Kolej Smart
10	Diploma in Brand Image and Management	Work Based Learning (WBL)	Universiti Nilai
11	Diploma in Retail Management	Kuliah, Tutorial, Amali, Work Based Learning	Kolej Smart
12	Diploma in Restaurant Management	Kuliah, Tutorial, Amali, Latihan Industri, WBL	Kolej SEGI Kuala Lumpur
13	Diploma in Culinary Arts	Kuliah, Tutorial, Amali, Latihan Industri, WBL	Universiti Teknologi MARA (UiTM)
14	Diploma in Hotel Management	Kuliah, Tutorial, Amali, Latihan Industri, WBL	Universiti Teknologi MARA (UiTM)

The 2u2i brand is used to depict the study mode where T&L occurs on and off campus in various combinations such as 3u1i, 2u2i, 2u1i and 1½u1i



Graduates who are industry aware and industry ready which in turn will increase their marketability and employability

2u2i study mode incorporating the WBL pedagogy was introduced with the aims at increasing students' employability after graduation and intensifies academia and industry collaborations.



Collaboration between the universities and the industries in the design and delivery of the academic program that are structured, formal and direct

2u2i Why?

Agreed on exposing students to more practical knowledge and preferred more programs that practiced “industry attachment”

Malaysian Employer Federation (MEF, 2017)

2u2i – helps students & graduates to remain relevant in the current job market

“high unemployment for tertiary-educated Malaysians which appears to buck conventional wisdom is due to a mismatch between industrial needs and graduates’ skills”.

The Economic Report 2019 -Malaysia

(Survey: World Bank and Talent Corp., 2014)



90% of companies believe that university graduates should have more industrial training by the time they graduate

Less than 10% of companies had experience in developing curricula or programs with universities (Bank Negara, 2017)



TOP 10 SKILL PRIORITIES IDENTIFIED BY EMPLOYERS

1	Positive Work Habits
2	Communication
3	Technical
4	Writing
5	English
6	Mathematics
7	Problem Solving
8	Reading
9	Computer
10	Team work



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

TOP 10 SKILLS IN 2020

Complex problem solving

Critical thinking

Creativity

People Management

Coordination with others

Emotional intelligence

Judgement and Decisions

Service Orientation

Negotiation

Cognitive flexibility

**SKILLS
BETTER
ACQUIRED
AT THE
WORK
PLACE**

Employability skills necessary for success in tourism and hospitality profession

- a. Communication skills.
- b. Team work
- c. Problem solving
- d. Good initiative and enterprising attitude
- e. Planning and organizing skills
- f. Good self- management
- g. Lifelong learning attitude
- h. Good technology know-how

Desired Qualities and Abilities

Good Communication Skills

Creativity

Engaging Social Skills

Charming Personality

Well Versed with the Aspects of the Industry

Problem Solving Skills

Patience

MISSION
ADMISSION



Important Soft-Skills in Hospitality

Positivity Communication
Problem-solving
Stress management
Teamwork
Empathy Self-confidence Resilience Self-awareness
Emotional intelligence
Innovation Networking Creativity

B.H.M.S.*

Business & Hotel Management School

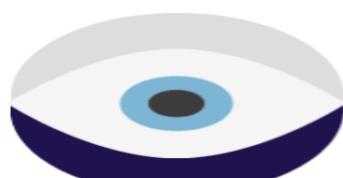
KEY SKILLS



A lot of patience



Ability to handle huge amount of stress



An eye for detail

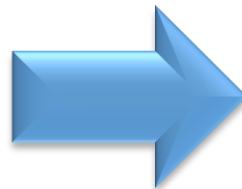


Good language & communication skills

INTEGRATION OF INDUSTRY PRACTICES / PROFESSION INTO ACADEMIC CURRICULA

CONVENTIONAL MODE

Knowledge is usually obtained from the study of academic subject, and students often fail to understand the relevance of disciplinary knowledge, and experience difficulties in transferring what they learned in the lecture hall to the workplace



2u2i

- a. Recontextualizing academic knowledge in the world of work



- b. Recontextualizing workplace knowledge in academic curricula





WIE

stands for

Work Integrated Education

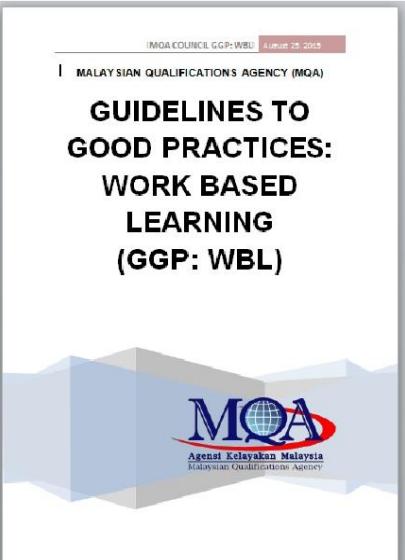


Abbreviations.com

These are programs that are **curricular**, appear in calendars as courses or course components, have assessments that lead to course grades or course completion.

•WBL is a **TEACHING PEDAGOGY**.

• **Scope of WBL** - individuals/students undertaking units of study for which **credit is awarded**, through **work placements** to whole/part of course/programme negotiated with **industry** which can be **assessed** as being at **HEP level**, and can be **recognized** in terms of standard HEP academic credit within the **MQF**





PENGALAMAN KERJA
YANG BERSTRUKTUR

PENDIDIKAN
SISTEMATIK

KERJASAMA
INDUSTRI

MOD
PENGAJIAN

PEMBELAJARAN
AKADEMIK
DENGAN
PENGAPLIKASIAN
DI TEMPAT KERJA

INTEGRATING INDUSTRY PRACTICES AND PROFESSION INTO ACADEMIC CURRICULUM THROUGH 2U2I AND WBL

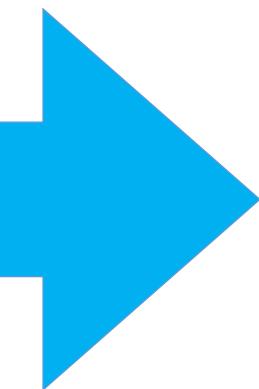


LINKING WORLD
OF T&L WITH
WORLD OF
PROFESSIONAL
AND PRACTICES

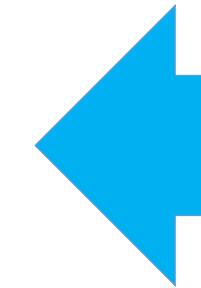
1. What disciplines or academic subjects is the profession is based on?
2. Which subjects are more science-based and which are more profession-based?
3. What elements of professional practice would be appropriate to include in both the science and profession-based subjects and why?
4. What are the particular difficulties in bringing elements of practice into the program?
5. When, and how, would it be appropriate for students experience the world of practice?

2U2I STUDY MODE – DISTINCT CHARACTERISTICS

Underpinning the whole notion of 2u2i is **experiential education** whereby students can acquire knowledge or meet learning goals through the implementation of specific technique and mechanism to test theoretical concept in the **work place**.



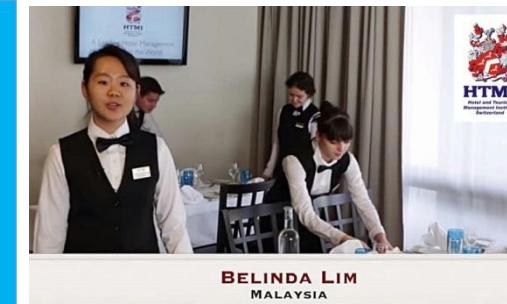
2u2i



“student is actively engaging (immerse) with the experience /industry”.



Student gains a **meaningful experience** that substantially contributes to their program, linked to curricular objectives



DEFINISI INDUSTRI

Sekumpulan organisasi atau firma yang terlibat dalam sesuatu aktiviti sosial atau ekonomi

Automotif



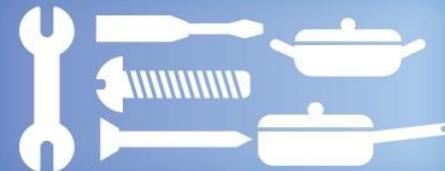
Kimia dan Petrokimia



Peralatan Perubatan dan Farmaseutikal



Besi dan Keluli



Perlادangan



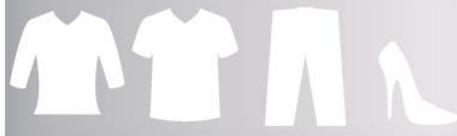
Makanan



Elektrik dan Elektronik



Tekstil, Pakaian dan Kasut



FAEDAH MOD PENGAJIAN

UNIVERSITY – INDUSTRY COLLABORATION

- Mendapat pengalaman secara langsung daripada pengamal industri dalam persekitaran yang sebenar
- Menggabungkan pembelajaran teori dan pengalaman praktis sebenar di dalam dan di luar kampus
- Mendapat peluang untuk meningkatkan kemahiran praktikal dan insaniah dalam suasana kerja sebenar
- Mendapat akses kepada pendidikan secara menyeluruh dan holistik melalui pengalaman pembelajaran di dalam dan di luar kampus
- Mendapat peluang untuk mewujudkan jaringan pelajar dengan pengamal industri
- Mendapat peluang untuk menperolehi pendapatan dalam tempoh pengajian dan meningkatkan peluang pekerjaan



earn as
you learn

INCREASE GRADUATE
EMPLOYABILITY

2u2i

- Mewujudkan budaya kolaboratif yang lebih sinergi bersama-sama industri
- Menarik lebih ramai pelajar yang berkualiti dan bermotivasi tinggi untuk menyertai program akademik yang kompetitif seperti 2u2i
- Mendapat peluang untuk menawarkan program akademik yang mampu diberi nilai tambah melalui penerapan program persijilan yang diperlukan oleh badan profesional dan industri bernilai tinggi
- Mendapat peluang untuk menambahbaik kualiti, reka bentuk dan penyampaian kurikulum bagi memastikan program yang ditawarkan relevan, terkini, berdaya saing yang dipacu industri, lantas merapatkan jurang ketidak sepadanan
- Mendapat menjalin kerjasama selain dari aspek akademik iaitu penyelidikan dan pembangunan (Research and Development – R&D) semasa di sektor industri

- Mengurangkan keperluan latihan dalaman (*in house training*) terhadap rekrut baharu kerana program 2u2i telah menyediakan graduan yang peka dan tersedia bekerja (*work aware and work ready*). Oleh itu tempoh ketersediaan-bekerja / *time to productivity* dapat dikurangkan
- Mendapat akses kepada graduan yang mempunyai kemahiran dan motivasi yang tinggi setelah melalui latihan secara terus di industri
- Mengurangkan kos pengambilan (*recruitment cost*) yang terlibat seperti pengiklanan, temubual, dan lain-lain. Ini adalah kerana industri mendapat akses kepada pelajar secara langsung yang di tempatkan di industri dalam tempoh pengajian
- Menerap budaya kerja korporat berkompetensi seawal sebelum pelajar bergraduasi
- Mendapat peluang untuk terlibat sebagai rakan inklusif IPT
- Mendapat input akademik dalam memperkasakan amalan industri sedia ada
- Mendapat peluang akses tenaga kepakaran dan fasiliti penyelidikan dari IPT
- Meningkatkan usaha Tanggungjawab Sosial Korporat (*Corporate Social Responsibility – CSR*) kepada IPT dan masyarakat

Industry Need
Human Capital



MQA COUNCIL GGP:WBL AUGUST 25, 2015

| MALAYSIAN QUALIFICATIONS AGENCY (MQA)

GUIDELINES TO GOOD PRACTICES: WORK BASED LEARNING (GGP: WBL)





WHAT IS WBL?



Job Shadow Program



APPRENTICESHIPS which one works for you?

- Internship
 - Practical training
 - Apprenticeship
 - Job shadow
 - Work placements
 - Cooperative technical education
 - Vocational training
 - Clinical
 - Mentoring/coaching
 - PhD industry
 - 2u2i



Definitions of WBL

- WBL is not something new.
 - Subset of workplace learning – Planned learning outcomes derived from experience of **performing a work role or function**.
 - **Many forms/approaches** for different purposes.
 - The main location of study/learning is at **the workplace** – WBL (**Learned & Assessed**)
 - WBL is a **TEACHING PEDAGOGY**.



Definitions of WBL

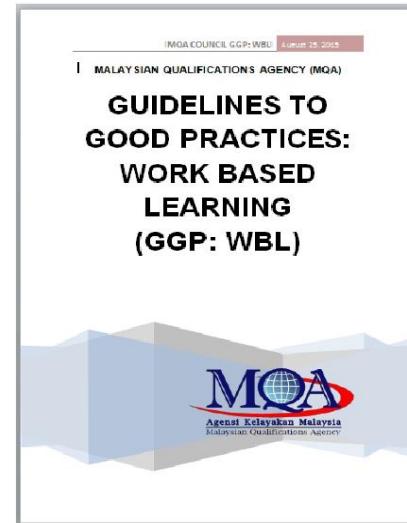


- “WBL is the term used to describe **a class of university programs** that bring together universities and work organization to create a new **learning opportunities in the workplaces**” (Boud and Solomon, 2001 – pg 12)
 - ‘.. where students are full-time employees whose **program of study is embedded in the workplace**’ (Sodiechowska and Maisch, 2006 – pg 12)
 - Full-time students who enroll and **follow WBL approaches**
 - WBL students or learners who are employed or in a **recognized relationship** with an external organization/employer;
 - WBL students or learners who may be undertaking **paid or unpaid work** in various.
 - **Scope of WBL** - individuals/students undertaking units of study for which **credit is awarded**, through **work placements** to whole/part of course/programme negotiated with **industry** which can be **assessed** as being at **HEP level**, and can be **recognized** in terms of standard HEP academic credit within the **MQF**. (pg 15)
 - **WBL is a TEACHING PEDAGOGY.**

CURRICULUM DESIGN



2u2i



TEMPOH PENGAJIAN	MODEL	STRUKTUR MODEL							
		SEMESTER							
		1	2	3	4	5	6	7	8
4 tahun	2u2i								
	3u1i								
3 tahun	2u1i								
2½ tahun	1½u1i								



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CHAPTER 2: PROGRAMME DESIGN (COPPA AREA 1: PROGRAMME DESIGN AND DELIVERY)

- **Structure of 2u2i mode of study**
- **Models of 2u2i**
- **Curriculum development and design**
- **Attributes of 2u2i**
- **Industry involvement in curriculum development**
- **Differences in industry**

EXPECTED

2 OUTCOMES

Adapt their behavior to different audiences they interact with (e.g. communicate , self-representation etc.)

Articulate the intellectual skills that underlie the work they engage in

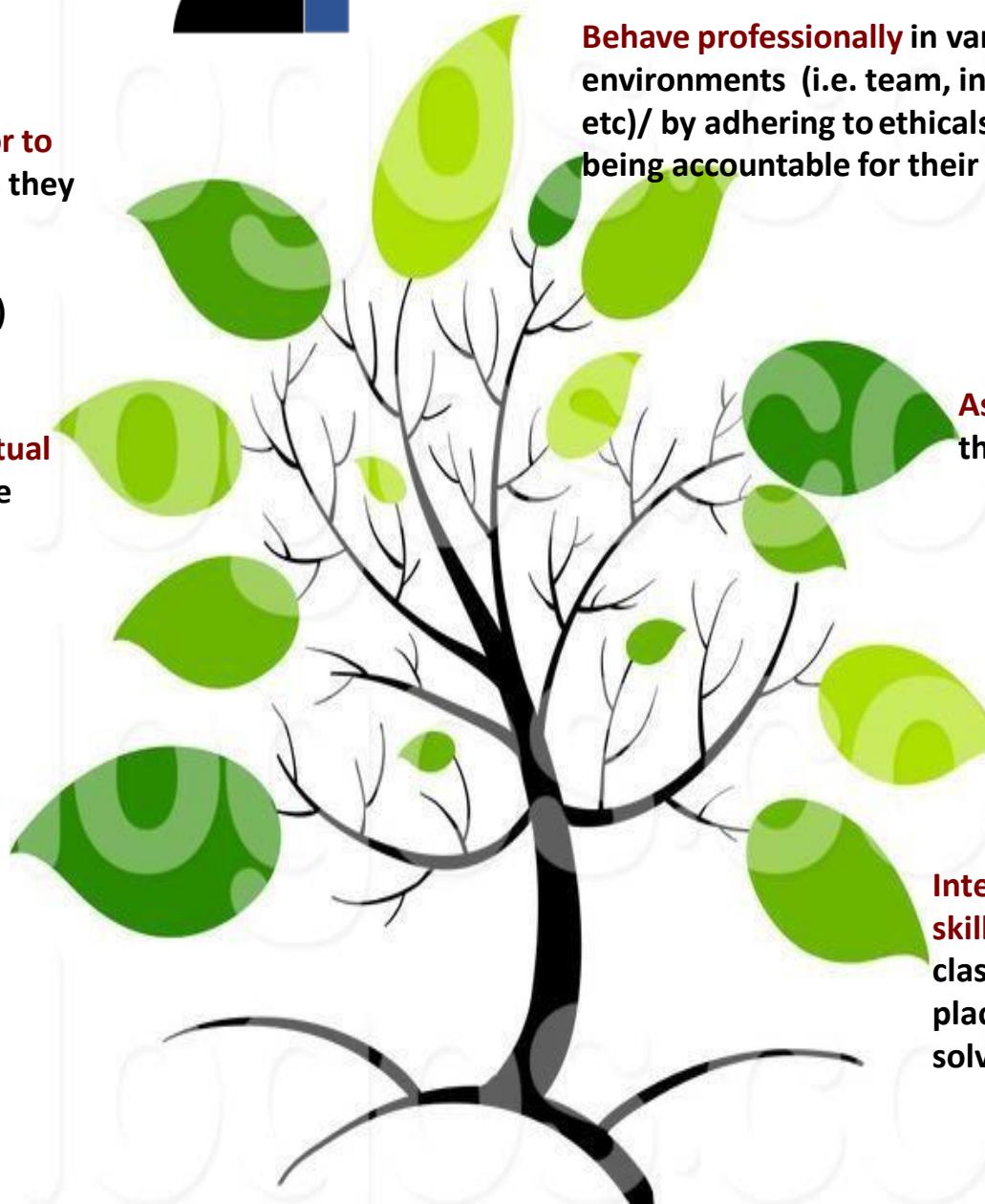
Gain new knowledge & develop new skills to successfully engage in unfamiliar activities & projects

Behave professionally in various environments (i.e. team, independent etc)/ by adhering to ethical standards & being accountable for their commitments

Assess, critique & improve their work

Identify & leverage opportunities to learn beyond the classroom

Integrate knowledge & skills learned in the classroom & the work place to identify & solve problems



ATRIBUT UTAMA MOD 2u2i

Integrasi Kurikulum

- Hasil pembelajaran diintegrasikan ke dalam kurikulum
- Pelan Pengajian Program
- Jumlah jam kredit

Kaedah Pentaksiran

- Penilaian di tempat kerja
- Komponen praktikal (60% -70%)
- Diberi nilai gred
- Pentaksiran mengikut kalendar akademik



Kaedah Penyampaian

- Penempatan Penuh (*Full immersion*)
- *Block release* (Pelepasan secara blok)
- Jurulatih Industri
- Pembelajaran teradun

Struktur Kurikulum

- Direka bentuk bersama-sama IPT – Industri
- Kredit minimum industri – 40% (2i), 20% (1i)
- Tempoh minimum penempatan industri 1 tahun
- Semester Akhir di industri / Latihan Industri
- Pelajar sepenuh masa

Pengalaman Kerja Berstruktur

- Pengalaman secara langsung
- Bermakna dan signifikan
- Berkaitan dengan kurikulum
- Sepenuh masa (Minimum 40 jam/minggu)
- Elaun/insentif (*learn & earn*)



2u2i MODEL STRUCTURE

STUDY DURATION	MODEL	MODEL STRUCTURE							
		SEMESTER							
		1	2	3	4	5	6	7	8
4 YEAR	2u2i								
3 YEAR	2u1i								
2 ½ YEAR	1½u1i								

CREDIT HOUR FOR INDUSTRY COMPONENT



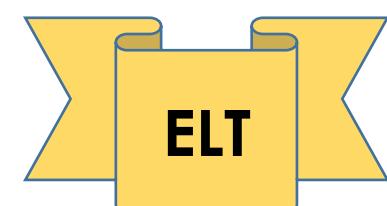
INDUSTRY COMPONENT	CREDIT HOUR ALLOCATION FOR INDUSTRY COMPONENT			
	CREDIT UNIT		% CREDIT	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
2i	48	60	40	50
1i	24	40	20	30



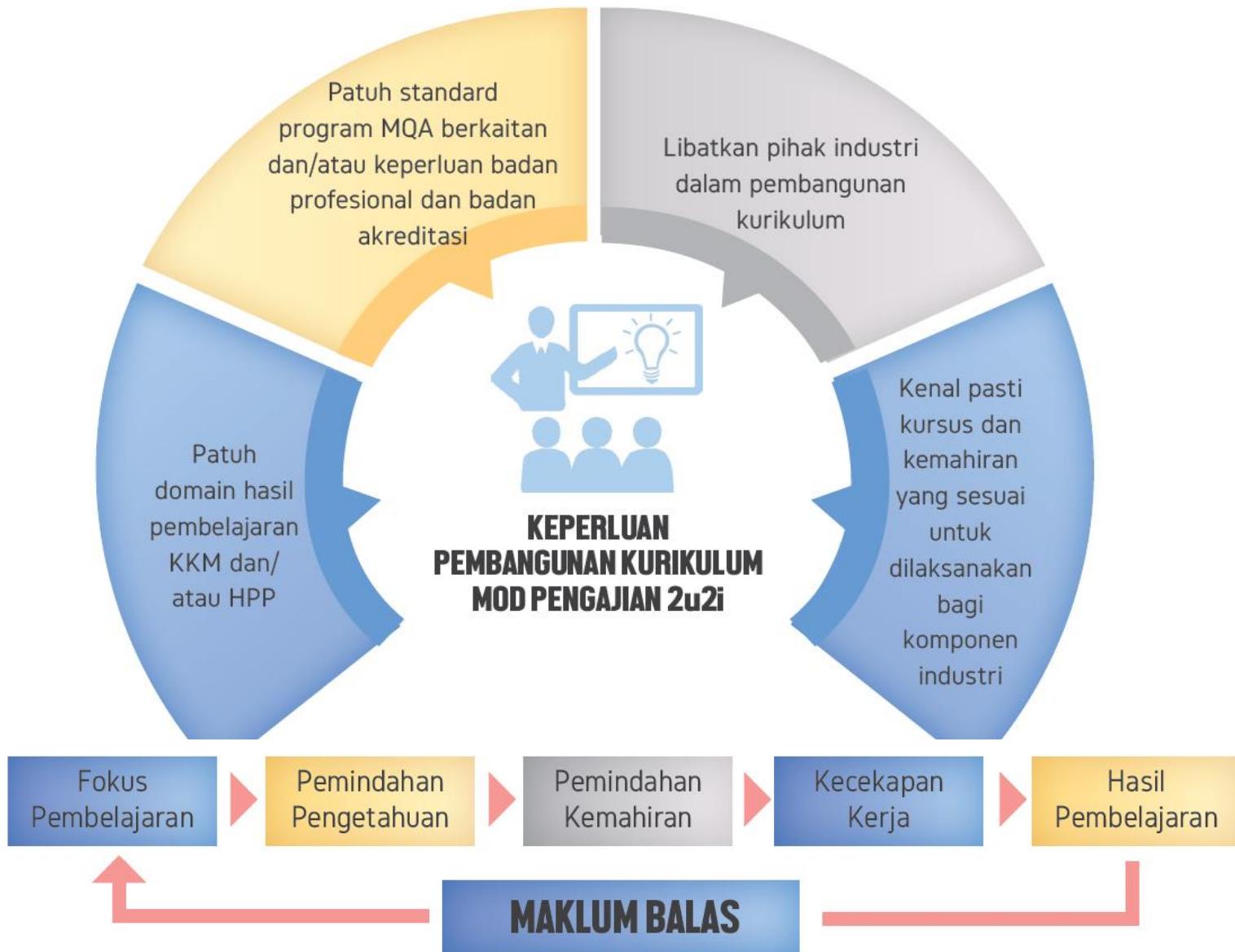
**COURSE CREDIT
CALCULATION**



2u2i



PEMBANGUNAN KURIKULUM 2u2i



PERANAN PIHAK INDUSTRI DALAM PEMBANGUNAN KURIKULUM

- 1. pembangunan silibus.**
- 2. melantik penasihat industri dalam reka bentuk kurikulum.**
- 3. penglibatan pakar industri dalam pembangunan rubrik.**
- 4. memastikan pihak industri mempunyai sumber dan kemampuan dalam aspek penyampaian dan pentaksiran kursus komponen industri.**
- 5. memastikan hasil pembelajaran difahami sepenuhnya dan diterima oleh pihak industri.**
- 6. penglibatan pihak industri dalam pemantauan dan penyemakan semula kurikulum program pengajian.**
- 7. Fokus pembangunan kurikulum komponen industri seharusnya memberi penekanan kepada aspek pemindahan pengetahuan, pemindahan kemahiran dan kecekapan kerja industri berkaitan**

PENEKANAN BAGI INDUSTRI YANG BERBEZA

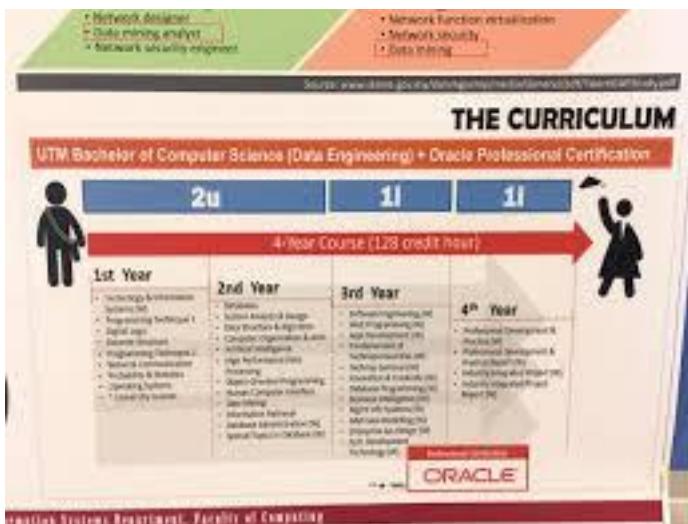
Keperluan kurikulum dan struktur Mod Pengajian 2u2i mungkin **berbeza di antara industri**, oleh itu **fleksibiliti** diberikan kepada IPT dan rakan industri dalam mereka bentuk kurikulum yang sesuai untuk memenuhi objektif Mod Pengajian 2u2i dan mencapai hasil pembelajaran untuk sesuatu program pengajian.



PROGRAM CURRICULUM DESIGN



2u2i



2u2i
**PROGRAM IJAZAH SARJANA
MUDA KEUSAHAWANAN DENGAN
KEPUJIAN**

CLEH: FAKULTI KEUSAHAWANAN DAN PERNIAGAAN



Universiti Malaysia Kelantan

Bachelor of Entrepreneurship with
Honours



Universiti Putra Malaysia

Bachelor of Science in Plantation
Management



UniSZA | Universiti Sultan Zainal Abidin

Bachelor of Science (Animal
Production and Health) with
Honours



Universiti Teknologi Malaysia

Bachelor of Computer Science (Data
Engineering)



Universiti Kebangsaan Malaysia

Sarjana Muda Sains Dengan
Kepujian (Sains Makanan



Universiti Malaysia Terengganu

Bachelor of Accounting

CURRICULUM DELIVERY

2u2i



BLOCK RELEASE

- SCHEDULE / LONG ATTACHMENT (1-4 SEM)
- TEACHING & LEARNING (T&L) & ASSESSMENT AT THE INDUSTRY

CURRICULUM DELIVERY

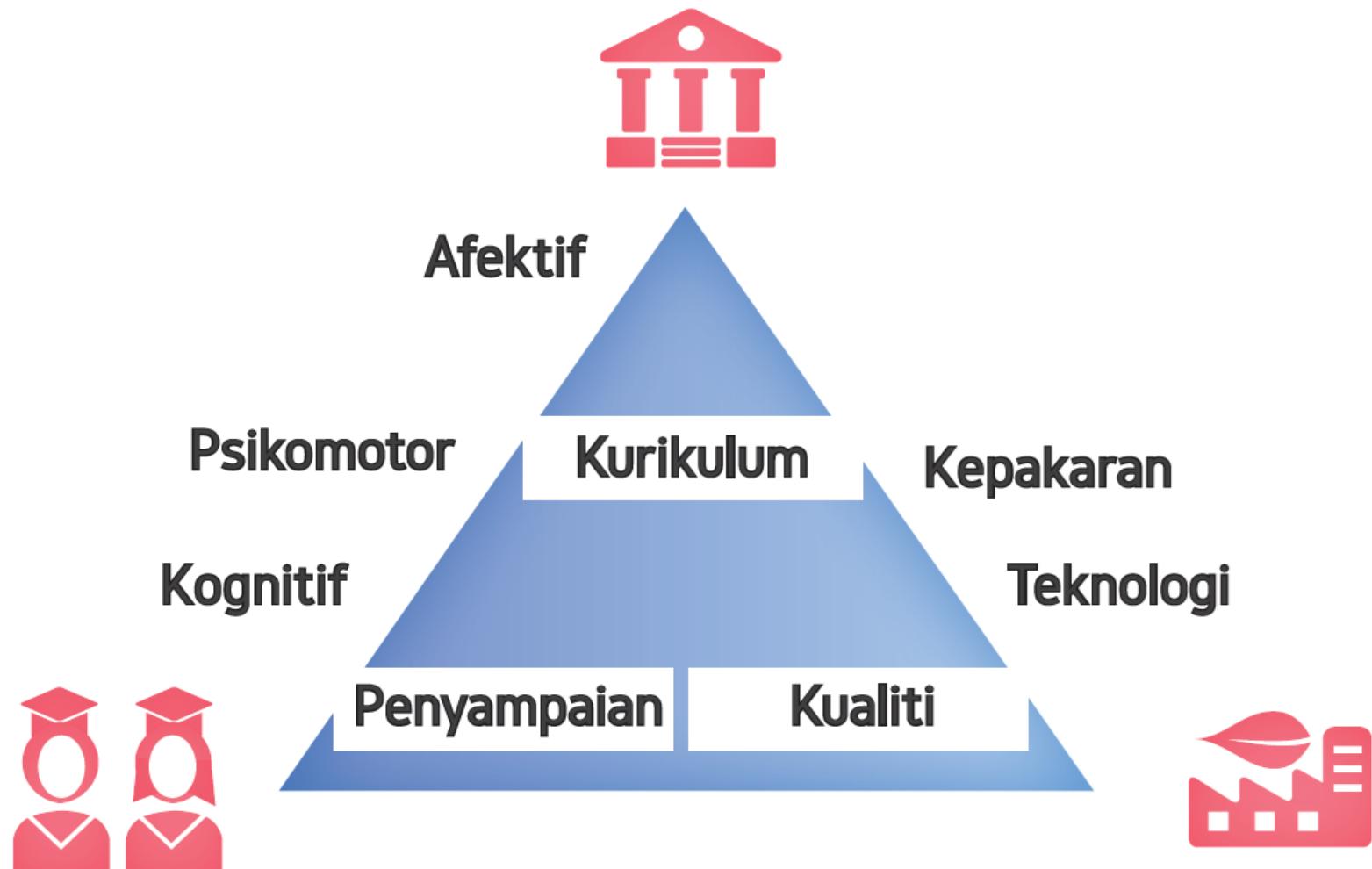
University Component	Industry Component
<ul style="list-style-type: none">. Lecture. Tutorial. Labs / Studio	<ul style="list-style-type: none">. Hands-on. Practical. Blended Learning. Theory Application



Chapter 3: Delivery Methods (COPPA Area 1: Programme Design and Delivery)

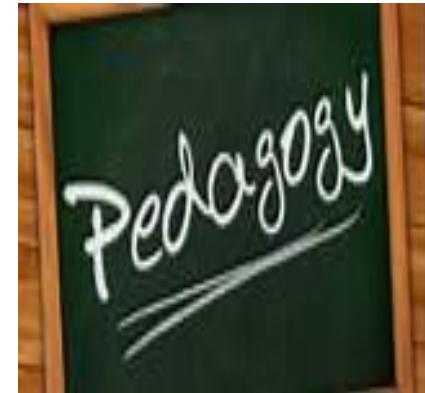
- Block release/Day release**
- Methods of delivery in industry**
- Industry coach**

KERANGKA PENYAMPAIAN KURIKULUM **2u2i**



CURRICULUM DELIVERY

- **Curriculum Delivery for a **day release** structure**
 - Classes or WBL experiences can be conducted at the workplace by either academic staff/tutor from the HEP or a qualified industry coach appointed by the HEP and workplace management;
- **Curriculum Delivery for a **block release** structure**
 - Classes or WBL experiences must be held at the workplace that provides structure WBL agreed by both HEP and industry partner and been conducted by qualified industry coaches and/or academic staff/tutor from the HEP.



KAEDAH PENYAMPAIAN DI IPT

Pembelajaran menggunakan Amalan Pembelajaran Berimpak Tinggi (High Impact Educational Practices – HIEPs) adalah sangat disarankan untuk diterapkan seawal tahun pertama bagi program Mod Pengajian 2u2i.

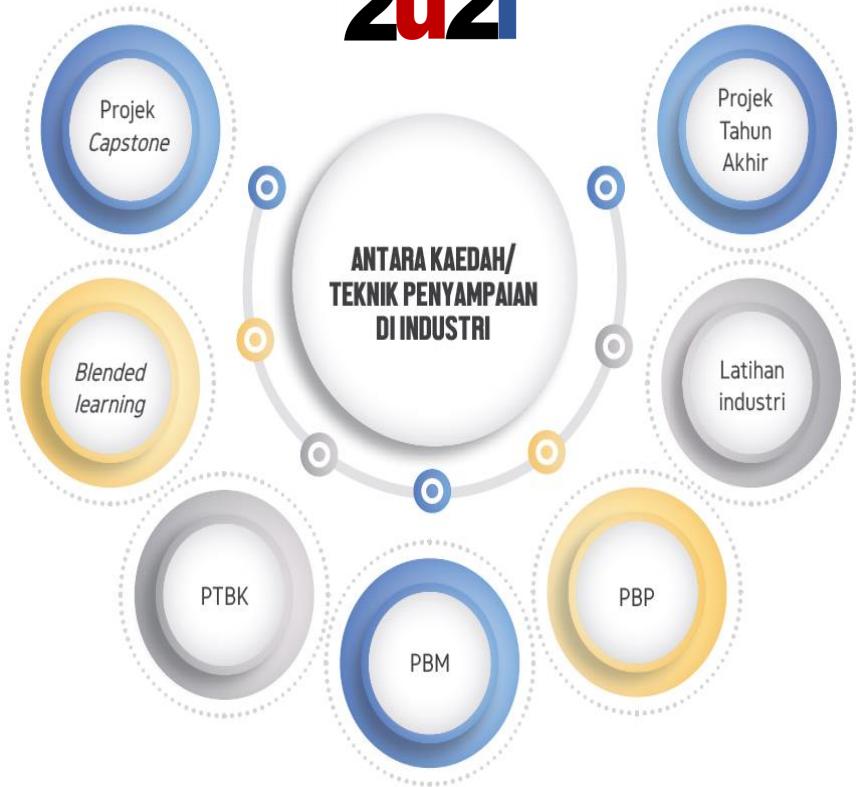
Sebahagian dari Amalan Pendidikan Berimpak Tinggi merangkumi:

- Kerja lapangan yang dipacu industri dalam bidang yang berkaitan
- Pembelajaran berasaskan masalah yang dibangunkan secara bersama dengan rakan industri
- Pembelajaran melalui pengalaman yang dilaksanakan secara kumulatif dengan kaedah pelepasan secara harian (day release) di industri
- Pembelajaran komuniti berasaskan
- Seminar tahun pertama
- Kerja kursus dan projek berkumpulan yang dilaksanakan secara kolaboratif
- Kajian empirikal
- Kajian kes yang dibangunkan bersama industri yang berkaitan

KAEDAH PENYAMPAIAN DI INDUSTRI

Kaedah/Teknik penyampaian di industri mesti dilakukan secara berstruktur dan menggunakan pendekatan pelepasan secara blok (block release) di mana keseluruhan semester pengajian adalah di industri

2u2i



- Pembelajaran Teradun (Blended Learning) – E-Pembelajaran, MOOC
- Pembelajaran Teori Berarahkan Kerja (PTBK) (Work-Directed Theoretical Learning) – Pengenalan teori/prinsip baharu
- Pembelajaran Berasaskan Masalah (PBM) (Problem-Based Learning) – penyelesaian masalah sebenar
- Pembelajaran Berasaskan Projek (PBP) (Project-Based Learning) – penglibatan dalam pembangunan sistem/produk
- Latihan Industri/ Praktikum/ Klinikal – yang lebih objektif dan menyeluruh, mengaplikasi teori di tempat kerja, membuat refleksi
- Projek Tahun Akhir – Kajian ilmiah individu dengan mengolah dan menggunakan pengetahuan akademik serta pengalaman praktikal
- Projek Capstone – projek yang mengintegrasikan pengalaman pelajar dalam menjalani keseluruhan program pendidikan

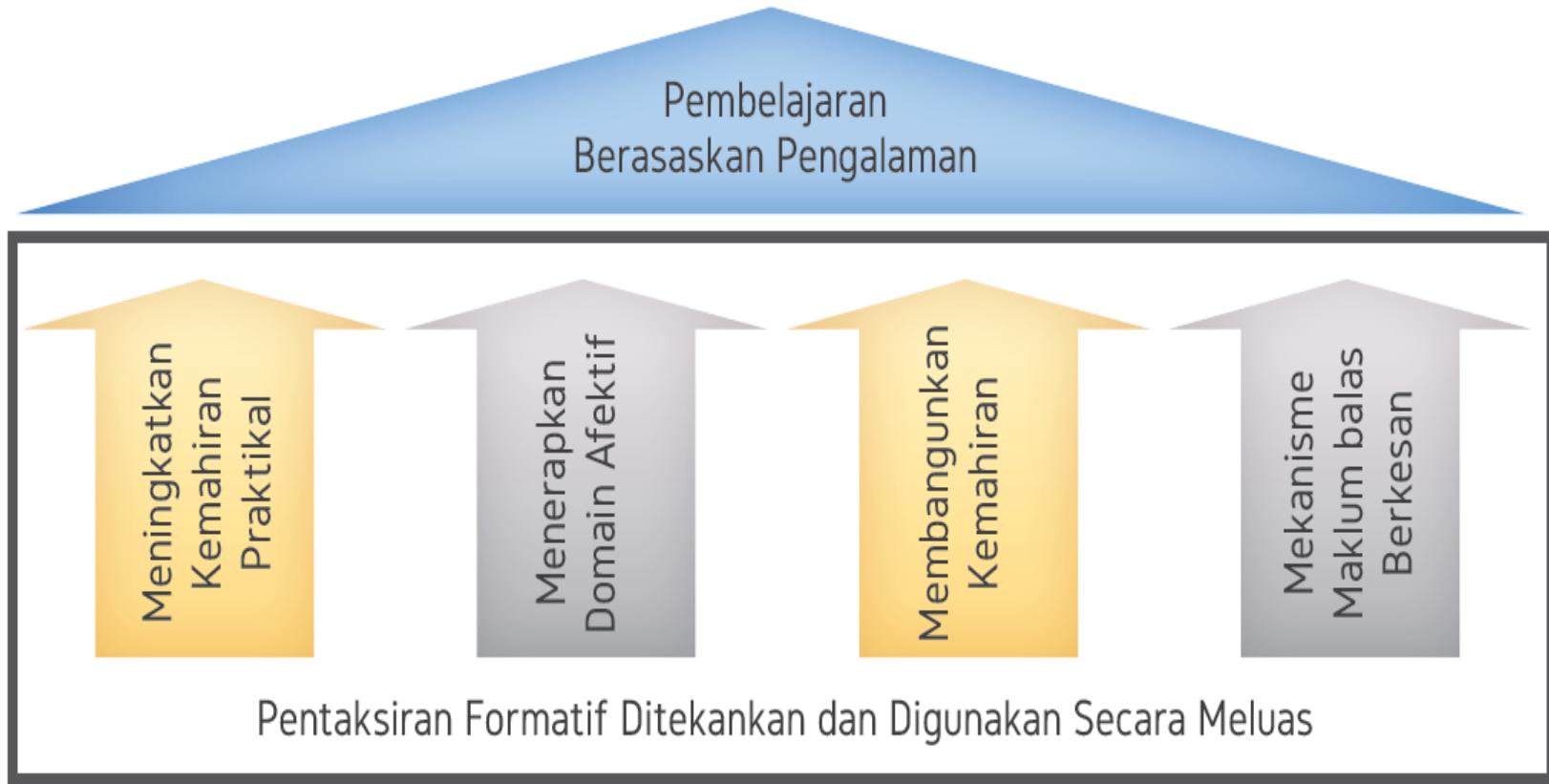
PENTAKSIRAN KOMPONEN INDUSTRI



Chapter 4: Industry Component Assessment

- Focus of Assessments
- Criteria of Assessments
- Types of Assessments
- Assessors
- Assessment Rubrics

PENTAKSIRAN KOMPONEN INDUSTRI



PENTAKSIRAN KOMPONEN INDUSTRI



IPT dan industri perlu menyediakan perancangan pentaksiran atau pelan **pentaksiran secara bersama** dari awal pembangunan kurikulum agar rangka pentaksiran yang **jelas** dan **kukuh** dapat dibangun dan dilaksanakan dalam keadaan terkawal.

Taklimat di antara IPT dan wakil industri wajar diadakan agar kedua-dua pihak faham dan **jelas berkenaan tanggungjawab** dan bidang kuasa masing-masing.

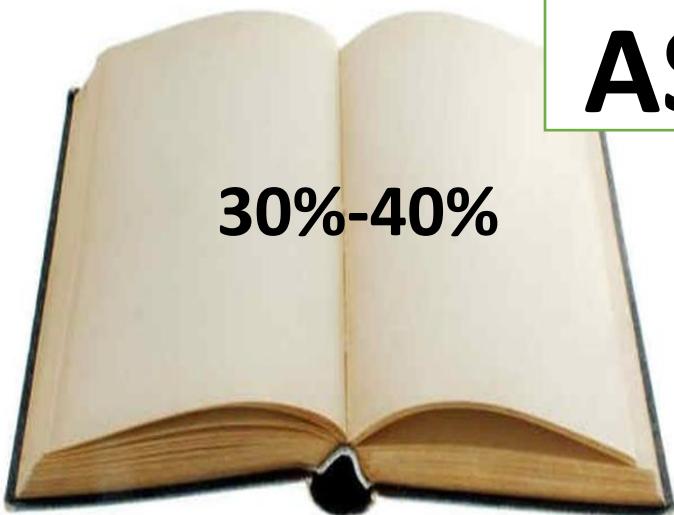
KEY ELEMENTS OF WBL ASSESSMENT

- Relevant to the **academic course** taken by students and **related to industry practice**.
- Able to **generate data** and provide **feedback** to promote personal or collective reflection on competence or performance;
- Able to identify, wherever possible, areas of practice where **further learning** should be focused;
- Conducted in environments that are **safe**, without **threats of litigation** or **fear of failure**;
- Relevant to each dimension **academic practice: educational practice, research practice and administrative practice**.
- Able to review and **verify student evidence** to support **achievement** in practice, at both formative and summative stages of the course/programme.
- Able to provide **constructive feedback** through formative and summative meetings, which enables the student to consolidate learning and identify continuing learning needs.





FOCUS OF ASSESSMENT



30%-40%

ASSESSED BY THE
ACADEMIC STAFF
and/or COACH



60%-70%

ASSESSED BY THE
INDUSTRY COACH

CADANGAN SKEMA PENTAKSIRAN MOD PENGAJIAN



Kaedah Pentaksiran		Fokus Pentaksiran		Kriteria Pentaksiran	Jenis Pentaksiran	Cadangan Pentaksir
Formatif/ Berterusan	Sumatif	Teori	Praktikal			
50-100	0-50	30-40	60-70	<ul style="list-style-type: none"> • Pengetahuan • Kemahiran praktikal • Kemahiran fungsian • Kemahiran peribadi & etika 	<ul style="list-style-type: none"> • Refleksi/<i>Post Module Assessment</i> • Pemerhatian • Portfolio • Buku Log • Pembentangan lisan dan/atau bertulis • Projek/produk di industri • Kerja lapangan • Temubual • Disertasi • Demonstrasi • Pembentangan • Penilaian praktikal • Ujian bertulis • Makmal • Laporan Jurulatih Industri • Rancangan projek • Pentaksiran kendiri • Pentaksiran rakan pelajar • Penilaian industri • Tugasan praktikal • Simulasi • Soal selidik majikan 	<ul style="list-style-type: none"> • Jurulatih Industri • Tenaga pengajar akademik • Badan profesional • Badan pelesenan • Pelajar • Rakan pelajar • Wakil komuniti

PENGURUSAN MOD PENGAJIAN

2u2i

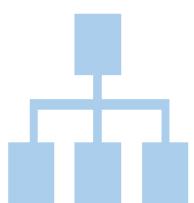


Chapter 5: Management of 2u2i mode of study

- Roles and Responsibilities of HEP
- Roles and Responsibilities of Industry
- Roles and Responsibilities of Students
- 2u2i Coordinator
- Qualifications of Industry Coach
- Mechanism of collaboration



PERANAN & TANGGUNGJAWAB IPT



Mewujudkan Jawatankuasa 2u2i atau menggunakan pakai jawatankuasa sedia ada



Melantik Penyelaras dan Jurulatih Industri

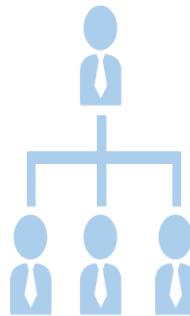


Taklimat/latihan untuk Jurulatih Industri



Memastikan keselamatan dan kebajikan pelajar

PERANAN & TANGGUNGJAWAB PIHAK INDUSTRI



Menganggotai Jawatankuasa 2u2i



Menyesuaikan dasar latihan industri



Melantik Penyelaras dan Jurulatih Industri



Perakuan perantisan kepada pelajar

PERANAN & TANGGUNGJAWAB PELAJAR



Mematuhi peraturan dan dasar



Memberi maklum balas kepada IPT dan industri



Mewujudkan hubungan positif



Tugasan dan laporan dalam masa yang ditetapkan

PERANAN DAN TANGGUNGJAWAB IPT

PENGURUSAN IPT

- Mewujudkan **Jawatankuasa Mod Pengajian 2u2i** atau menggunakan pakai jawatankuasa sedia ada yang melibatkan pihak industri yang relevan dengan program mengikut komposisi yang bersesuaian. Bagi tujuan dokumen ini, jawatankuasa ini akan dinamakan sebagai Jawatankuasa Mod Pengajian 2u2i
- Melantik **penyelaras Mod Pengajian 2u2i** dan **Jurulatih Industri** di peringkat fakulti
- Mengadakan **taklimat/latihan pengajaran dan pentaksiran** untuk Jurulatih Industri yang dilantik bagi memantapkan proses PdP
- Memastikan **keselamatan dan kebajikan** pelajar yang terlibat dalam Mod Pengajian 2u2i.

PERANAN DAN TANGGUNGJAWAB IPT

JAWATANKUASA MOD PENGAJIAN 2u2i

- Mereka **bentuk dan menyemak kurikulum** program Mod Pengajian 2u2i
- **Merancang, memantau dan menilai pelaksanaan**
- Mengenal pasti pihak **industri** yang sesuai
- Mengenalpasti keperluan **sumber, fasiliti** dan **kepakaran**
- Mencadangkan **penambahbaikan** pelaksanaan program
- Memastikan pelajar berada dalam persekitaran pembelajaran yang **kondusif**
- menguruskan **jalinan hubungan kerjasama** di antara IPT dengan pihak industri melalui Nota Kerjasama / Nota Persefahaman / Surat Hasrat / Memorandum Persefahaman / Memorandum Perjanjian

PERANAN DAN TANGGUNGJAWAB IPT

PENYELARAS IPT MOD PENGAJIAN 2u2i

- Menjalankan tugas sebagai **Pegawai Perhubungan** program antara IPT dengan pihak industri
- Menyelaras **takwim** pelaksanaan dan pemantauan Mod Pengajian 2u2i
- Menyelaras **aktiviti PdP** yang memenuhi kehendak pihak industri dan berpandukan kurikulum
- Menyelaras pengurusan **rekod akademik** pelajar
- Menyelaras penyediaaan **laporan** pelaksanaan, pemantauan dan penilaian
- Memberi **taklimat pelaksanaan** kepada pelajar, tenaga pengajar IPT dan Jurulatih Industri

PERANAN DAN TANGGUNGJAWAB INDUSTRI

PENGURUSAN INDUSTRI / ORGANISASI

- Memainkan peranan aktif dalam **keanggotaan Jawatankuasa Mod Pengajian 2u2i IPT**
- Menyesuaikan **dasar latihan** pihak industri untuk memenuhi keperluan dan kehendak 2u2i
- Merancang **strategi pelaksanaan PdP komponen industri**
- Menyediakan **sumber, fasiliti dan kepakaran yang bersesuaian**
- **Memantau** keberkesanan pelaksanaan
- Mencadangkan **penambahbaikan pelaksanaan**
- Melantik **Penyelaras Industri** dan **Jurulatih Industri**
- Membenarkan tenaga **pengajar akademik** untuk melawat pelajar
- Mempertimbangkan pemberian **elaun/incentif** kepada pelajar
- Memastikan **keselamatan** dan **kebajikan** pelajar
- Mengeluarkan **surat atau sijil** perakuan perantisan kepada pelajar

PERANAN DAN TANGGUNGJAWAB INDUSTRI

PENYELARAS INDUSTRI

- Membantu pelajar dalam merancang **penempatan** di industri
- Bekerja rapat dengan semua **pihak berkepentingan**
- Mengelakkan **komunikasi** yang kerap dan berkesan antara semua pihak berkepentingan
- Menyelaras **fail pelajar**
- Menyelaras **pelaksanaan PdP** di pihak industri
- Menyelaras proses **penilaian pelajar** dan menyerahkan kepada IPT pada masa yang ditetapkan

PERANAN DAN TANGGUNGJAWAB INDUSTRI

JURULATIH INDUSTRI

- Memberi **latihan dan bimbingan** kepada pelajar mengikut keperluan kursus;
- Melaksanakan **pentaksiran** kursus dan memantau **kemajuan pelajar**;
- Memberi **bimbingan** kepada pelajar dalam penyediaan laporan/tugasan;
- Memastikan **laporan pentaksiran** diserahkan kepada Pegawai Penyelaras mengikut masa yang ditetapkan;
- Memastikan pelajar mematuhi peraturan **keselamatan dan kesihatan** di tempat kerja pada setiap masa.

KELAYAKAN JURULATIH INDUSTRI



- 01 Ijazah Kedoktoran dalam bidang berkaitan; ATAU
- 02 Sarjana dalam bidang berkaitan; ATAU
- 03 Sarjana Muda dengan tiga (3) tahun pengalaman dalam bidang berkaitan; ATAU
- 04 Diploma Lanjutan/Diploma dengan lima (5) tahun pengalaman dalam bidang berkaitan; ATAU
- 05 Sebarang sijil atau kelayakan yang diiktiraf oleh syarikat dengan tujuh (7) tahun pengalaman dalam bidang berkaitan; ATAU
- 06 Pengalaman kerja lima (5) tahun ke atas dengan kemahiran istimewa/ pengkhususan bidang yang diiktiraf secara profesional/pengiktirafan antarabangsa/ nilai komersil yang tinggi.

* Sekiranya Jurulatih Industri perlu mengajar komponen teori di industri, maka kelayakan akademik sekurang-kurangnya satu (1) tahap lebih tinggi daripada program pengajian diperlukan.

PERANAN DAN TANGGUNGJAWAB PELAJAR

Menghadiri semua sesi taklimat, aktiviti PdP, aktiviti pentaksiran

Mematuhi dasar, peraturan dan garis panduan

Mewujudkan hubungan positif

Memberi maklum balas kepada tenaga pengajar IPT dan Jurulatih Industri



Menjaga nama baik

Memaklumkan sebarang masalah yang dihadapi

Menyerahkan semua tugas dan laporan dalam masa yang ditetapkan

Menyempurnakan dengan jayanya keperluan pengijazahan

COLLABORATION UNIVERSITY-INDUSTRY

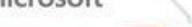


- ✓ 2 Years in University, 2 Years in industry
- ✓ Intensify industry exposure to create workforce ready graduates.

Universities:



Industry Partners:



INDUSTRY SELECTION CRITERIA

RELEVANT
TO THE
STUDY
FIELD

LEGAL/
REGISTERED
INDUSTRY

HAVING
ENOUGH &
SUITABLE
FACILITIES

HAVING
QUALIFIED &
SKILL
WORKFORCE



UNIVERSITY – INDUSTRY COLLABORATION



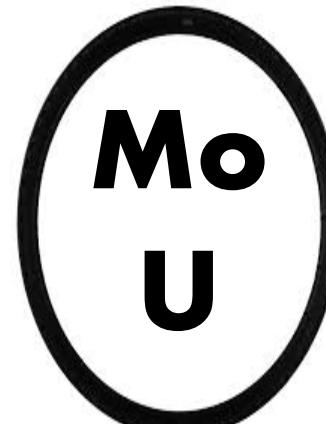
MoA



COLLABORATION NOTE
/ UNDERSTANDING NOTE
/ LETTER OF INTENT

MoU

MEKANISME PELAKSANAAN KERJASAMA IPT - INDUSTRI

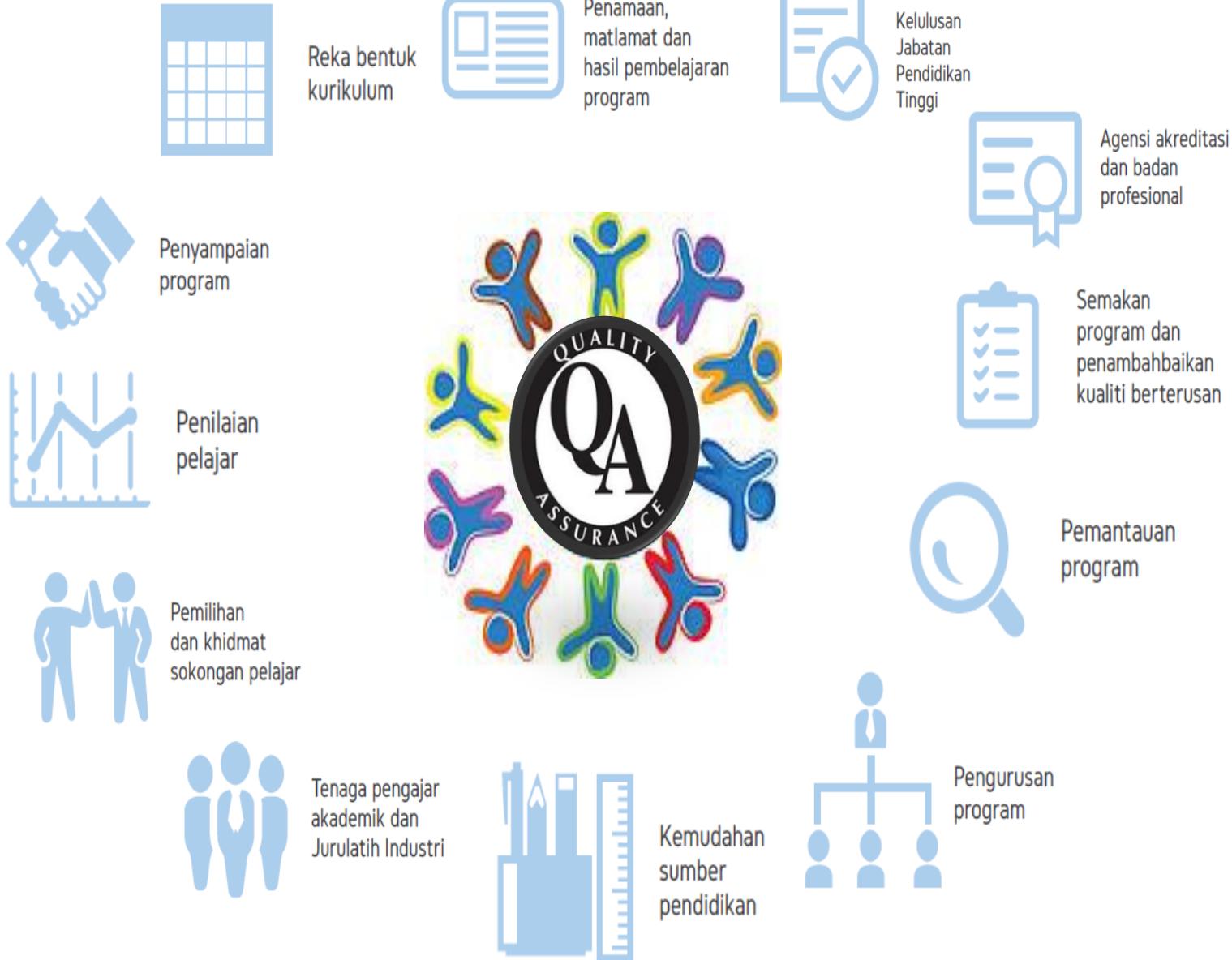


KRITERIA PEMILIHAN INDUSTRI



MANA-MANA SYARIKAT YANG BERDAFTAR DENGAN TALENTCORP DI BAWAH STRUCTURED INTERNSHIP PROGRAM (SIP) LAYAK MENIKMATI INSENTIF CUKAI BERGANDA

Chapter 6: Quality Assurance



2u2i TARGET

32 programs (2018)

20 programs (2019)

20 Programs (2020)

Estate Management

Accounting

Entreprenuership

Animal Health & Production

Data Engineering

**Sceince & Food
Science**

Film & Theatre

Broadcasting



