

SOARING UPWARDS

MALAYSIAN HIGHER EDUCATION

vol. 3 2015-2017



2015-2017

“Soaring Upwards” is the official motto of the Ministry of Higher Education. It is used to describe Malaysia’s higher education landscape that is continuously improving, recognising various successes achieved over the years while acknowledging that continuous efforts are required to propel the nation’s higher education system to the next level. Ultimately, Soaring Upwards is about the enculturation of excellence. This book serves as a reference point as to how far we have come, our vision of the future, and how we intend to get there.

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The MQA's Dynamic Ecosystem
First national QA body in Southeast Asia to be certified
as aligned with the international good practices in QA
Leading the young QA officers
Member in the Drafting Committee for the Global Convention
on the Recognition of Higher Education Qualifications
International membership
Malaysian Qualifications Framework 2.0
Self-Accreditation
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Best performer in Quality Assurance & Recognition Policy
Enhancing information accessibility through technology
MQA Training Centre
MQA Global Network

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Champions of ASEAN Skills Competition
Sony World Photography Award
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A Special Talent Cooking Up a Storm

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MINISTRY OF HIGHER EDUCATION MALAYSIA

The Ministry of Higher Education Malaysia has been tasked to lead the growth and development of higher education in Malaysia and is guided by the Malaysia Education Blueprint 2015-2025 (Higher Education) or MEB (HE). 10 Shifts have been identified in the MEB (HE) to take Malaysia's higher education system into the future. This involves the Ministry's agenda of Redesigning Higher Education in order to produce holistic, entrepreneurial and balanced graduates, create an innovation ecosystem, enhance public-private partnerships, empower technical and vocational education and training (TVET), and make Malaysia an international education hub.

Led by Dato' Seri Idris Jusoh, the Minister of Higher Education, he pledges that **"The Ministry will deliver the BEST EDUCATION in the world to all Malaysians and international students"**.



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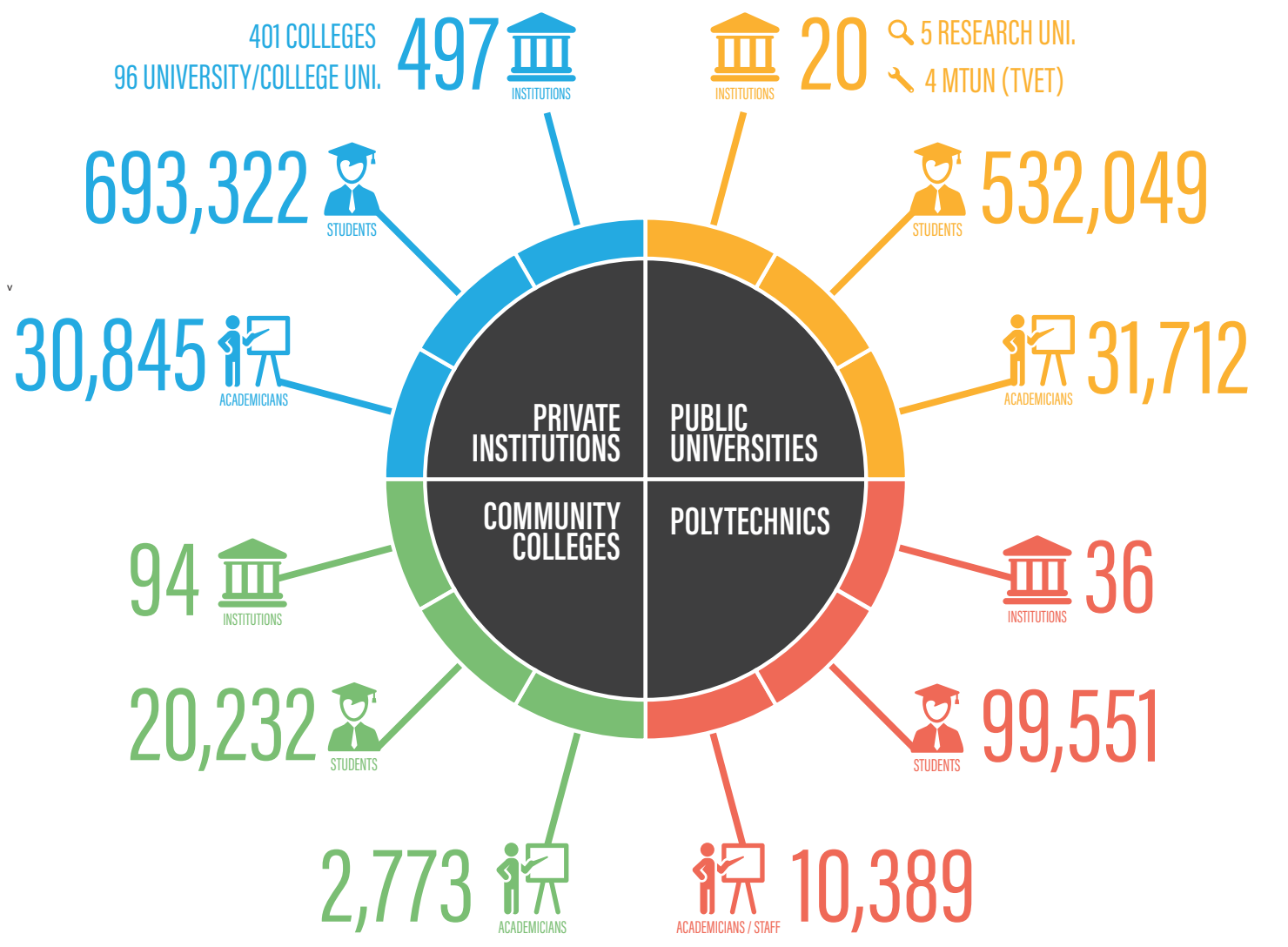
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HIGHER EDUCATION LANDSCAPE

 647

 1,345,154
(127,935 INTERNATIONAL)

 69,999 ACADEMICS
(20,486 Phd) - 42%



MALAYSIA EDUCATION BLUEPRINT 2015-2025 (HIGHER EDUCATION)



The 10 Shifts



System Aspirations

The MHR will therefore build on the five aspirations set out in the MHR of access, quality, equity, unity, and efficiency.

Area	Aspiration	Target	
HIGHER EDUCATION	ACCESS	By 2025, the Ministry expects to increase access to and enrolment in higher education. Malaysia aims to successfully improve tertiary enrolment rates from 38% currently to 55% and higher education enrolment from 45% to 55%, the will bring Malaysia on par with the highest enrolment levels in ASEAN. This growth enrolment will require an additional 1.1 million places by 2025, meeting through growth in technical and vocational education and training (TVET), private HE, and online learning. The sector plans and implement the expansion plan will be determined in close consultation with industry to ensure supply matches demand.	100% tertiary enrolment
	QUALITY	The Ministry's aspiration covers three aspects: quality of graduates, quality of institutions, and quality of the overall system. On quality of graduates, the Ministry expects to increase the current HE graduates enrolment rate to more than 20% in 2025. On quality of institutions, only one of Malaysia's universities is currently in the Top 200 global rankings. By 2025, the Ministry aims to place one university in the Top 25, two in the Global Top 100, and four in the Global Top 200. Finally on quality of the overall system, the Ministry expects to move to LE1 ranking for research output from 38th out of 80 countries in the top 25, and to increase the number of international students in HE from 108,000 today to 200,000 students in HE and research by 2025.	Top 3% of universities
PRESCHOOL TO POST-SECONDARY EDUCATION	EQUITY	Although there is currently a lack of comprehensive data to effectively assess equity in the system, the Ministry aims to ensure that all Malaysians have the opportunity to fulfil their potential regardless of background. For example, the Ministry is committed to improving the enrolment rate and completion rate of students from socio-economically disadvantaged backgrounds and communities.	50% enrolment
	UNITY	Similarly, while there is no widely accepted method to measure unity, the Ministry is committed to ensuring that enrolled HE students reflect the race of Malaysia's population. The aim is to create an education system that promotes students with shared values, shared experiences, and common aspirations by embracing diversity.	50% enrolment
PRESCHOOL TO POST-SECONDARY EDUCATION	EFFICIENCY	In terms of efficiency, the Ministry aims to ensure the return on investment in higher education and to maintain the current level of government expenditure per student across public institutions. Malaysia also expects to see the total of the 50 countries in the LE1 output ranking that covers research, innovation, and entrepreneurship to be in the top 25 by 2025.	Maximise student outcomes within current budget

“Shaping the future of our nation”

-DATO' SRI NAJIB RAZAK, PRIME MINISTER OF MALAYSIA, AT THE LAUNCH OF THE BLUEPRINT ON 7TH APRIL 2015

REDESIGNING HIGHER EDUCATION

“How do we ensure that higher education remains relevant?”

This is a frequently asked question and one that is pertinent in view of various technological advancements and the coming of the 4th industrial revolution that will disrupt and change education as we know it.

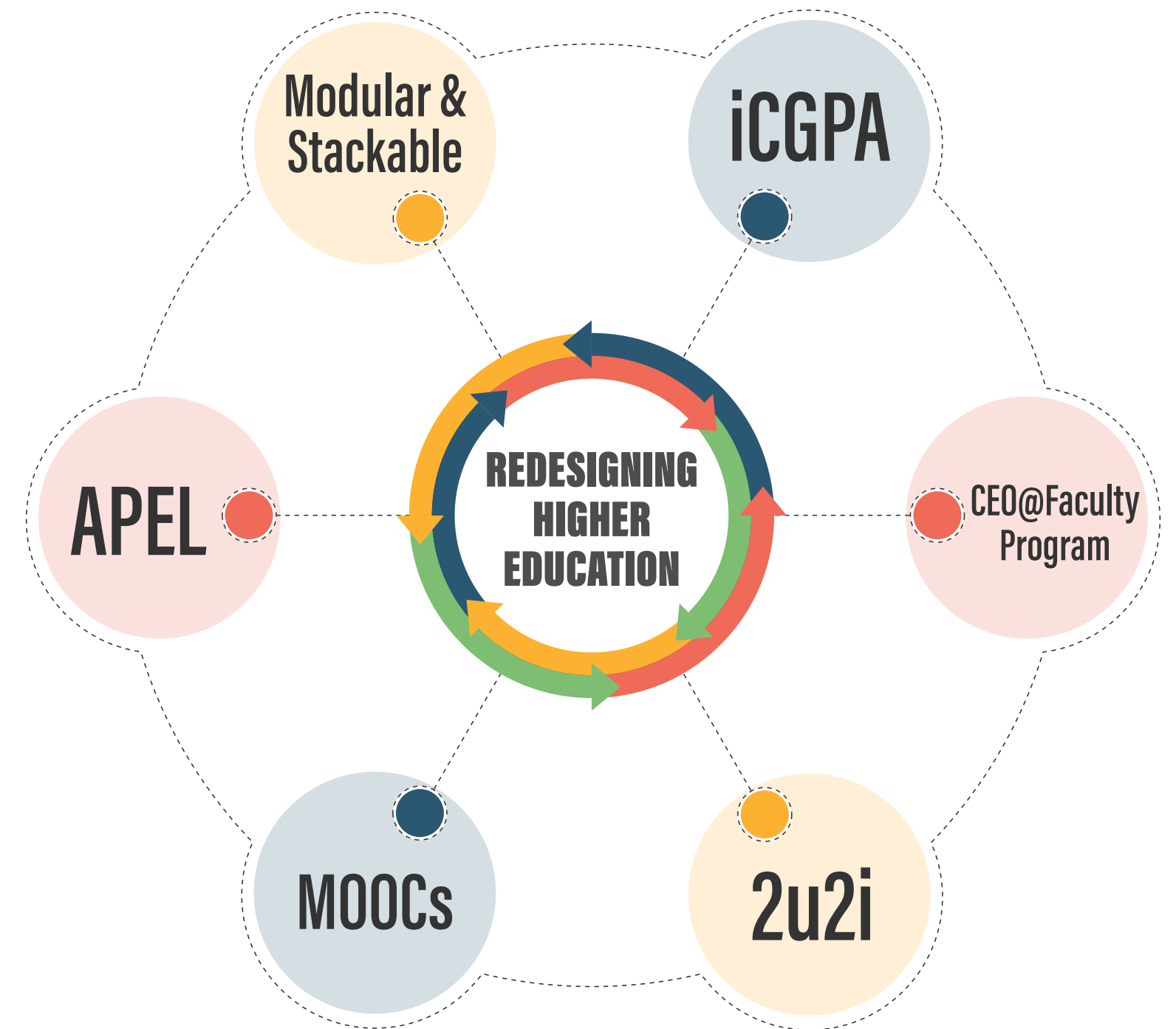
The short answer is that in order to remain relevant, education must evolve.

Today's learners are unlike the learners of yesterday. Knowledge is consumed differently, and as such needs to be delivered differently. Industry and workforce expectations have become more sophisticated, and as such curriculum must match with its sophistication. Research expectations are now greater, and as such research outcomes cannot be confined to just publications, rather, they must be translational (i.e. beneficially impact the community).

In view of this, the Ministry has embarked on an agenda known as Redesigning Higher Education. This agenda involves looking into the student assessment method, the participation of industry in academia, the recognition of prior experiential learning, the empowering of TVET, the awarding of credits for online learning, and the enhancement of work-based learning programmes.

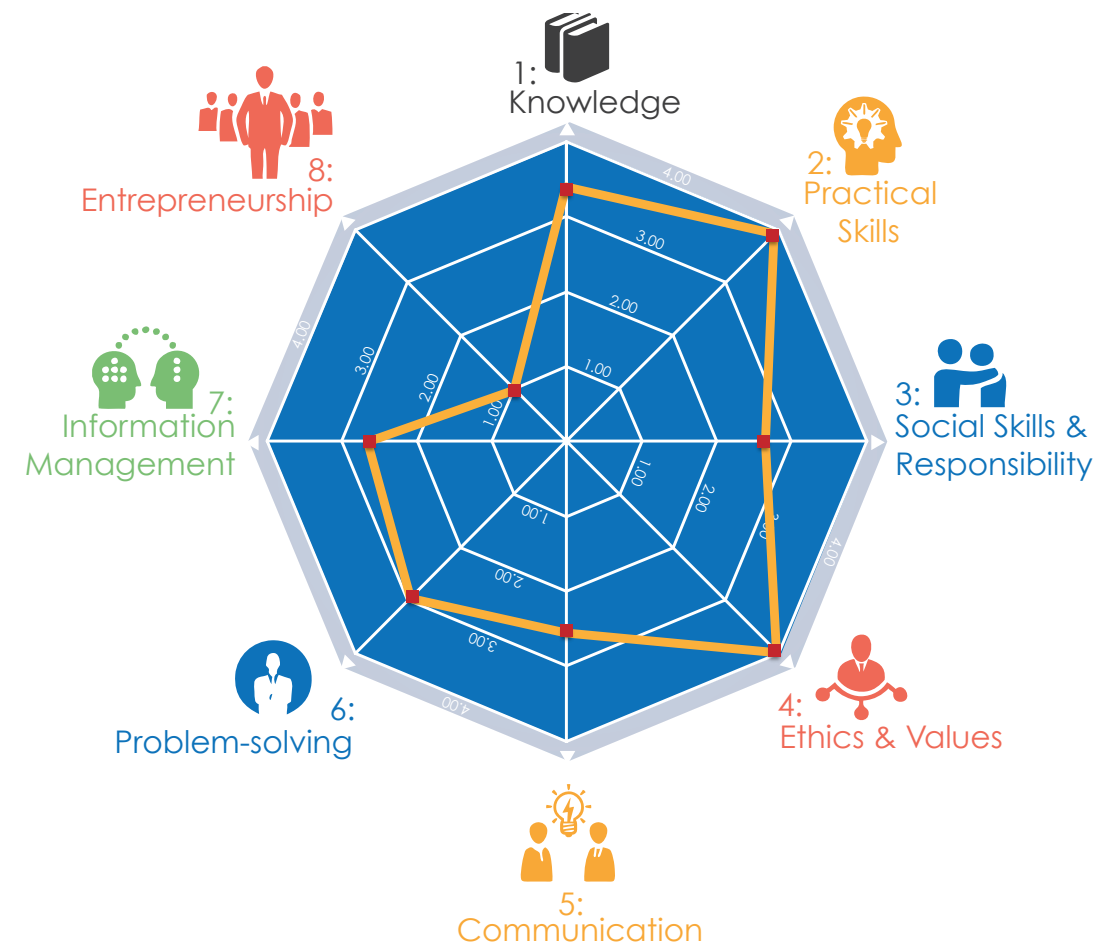
Redesigning Higher Education recognises that education must be accessible to anyone, anytime and anywhere (i.e. education is flexible). The agenda aims to empower choice, encourage knowledge diversity, and instil a strong sense of social responsibility and consciousness into students and the higher education community at large.

In line with the Redesigning Higher Education agenda, the Ministry has introduced and begun implementing a number of initiatives. These initiatives are explained in the following pages.





provide better feedback and improvement opportunities, and potential employers to better understand their future employees and their needs. The iCGPA was piloted in 2015 in 5 public universities and based on positive feedback received from lecturers and students it will be implemented in the 15 remaining public universities nationwide beginning September 2016.



Learn from the PROs

By bridging the private-public gap and strengthening industry-academia links, the Ministry hopes to enhance university offerings and knowledge transfer initiatives with the industry. Starting in 2015 with 24 CEOs, 2016 saw 60 CEOs join the programme, including senior officials from the Malaysian civil service. The CEO @ Faculty Programme is an initiative under Shift 2 MEB (HE) "Talent Excellence".

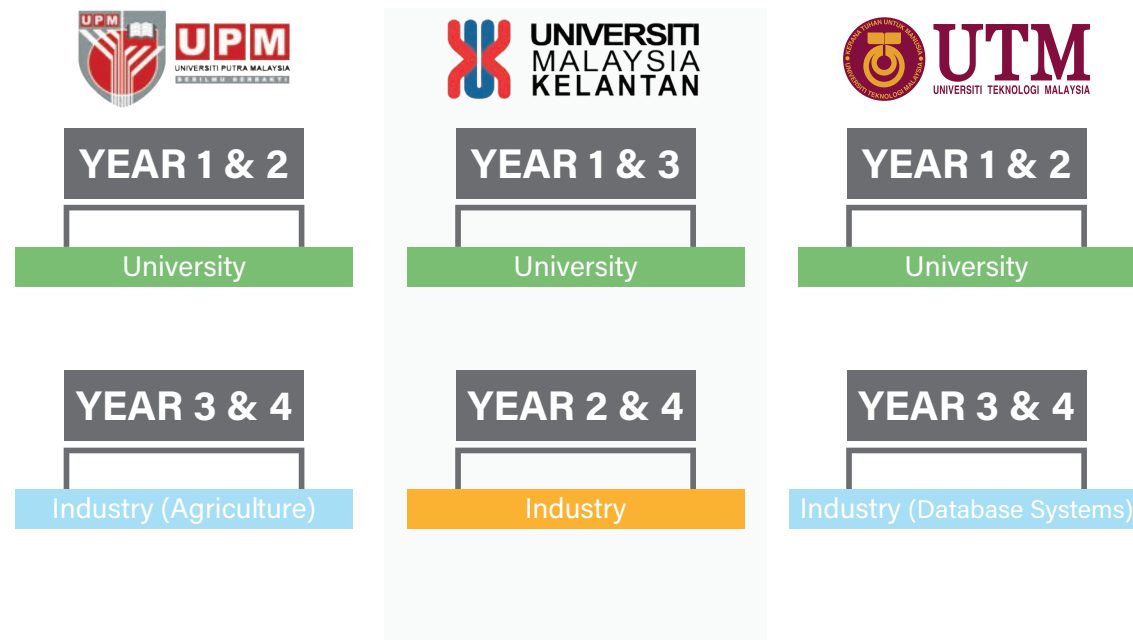


2u2i

Learning Through Work and Study

2u2i (or 2 years in university, 2 years in industry) is a work-based learning (WBL) programme which provides undergraduate students enhanced industry exposure during the course of their studies. Students spend 2 years focusing on theoretical aspects of the course and 2 years applying their knowledge in industry. Industry exposure may include

incorporating companies and running start-ups, which the students can continue to operate upon graduation. The 2u2i programme is supported by the industry and also seeks to inculcate the spirit of entrepreneurship. It is in line with Shifts 1 and 7 (Innovation Ecosystem) of the MEB (HE).



2016/2017 Academic Session:

Universiti Malaysia Kelantan (UMK)
- Bachelor in Entrepreneurship (Hons)

Universiti Putra Malaysia (UPM)
- Bachelor in Agricultural Management Sciences

Universiti Teknologi Malaysia (UTM)
- Bachelor in Computer Sciences (Database Systems)

Universiti Sultan Zainal Abidin (UniSZA)
- Bachelor in Animal Health and Reproduction (Hons)

Universiti Kebangsaan Malaysia (UKM)
- Bachelor in Sciences (Olechemistry) (Hons)
- Bachelor in Sciences (Biotechnology & Management) (Hons)
- Bachelor in Sciences (Bioinformatics) (Hons)
- Bachelor in Sciences (Environmental Sciences) (Hons)

2017/2018 Academic Session:

Universiti Teknologi MARA (UiTM)
- Bachelor in Animation (Hons) 2D Animation Production
- Bachelor in Animation (Hons) 3D Animation Production
- Bachelor in Creative Industry Management (Hons) Film Production / Artistic Management
- Bachelor in Filmmaking (Hons) Directing
- Bachelor in Filmmaking (Hons) Cinematography
- Bachelor in Writing (Hons) Creative Writing
- Bachelor in Writing (Hons) Screenwriting

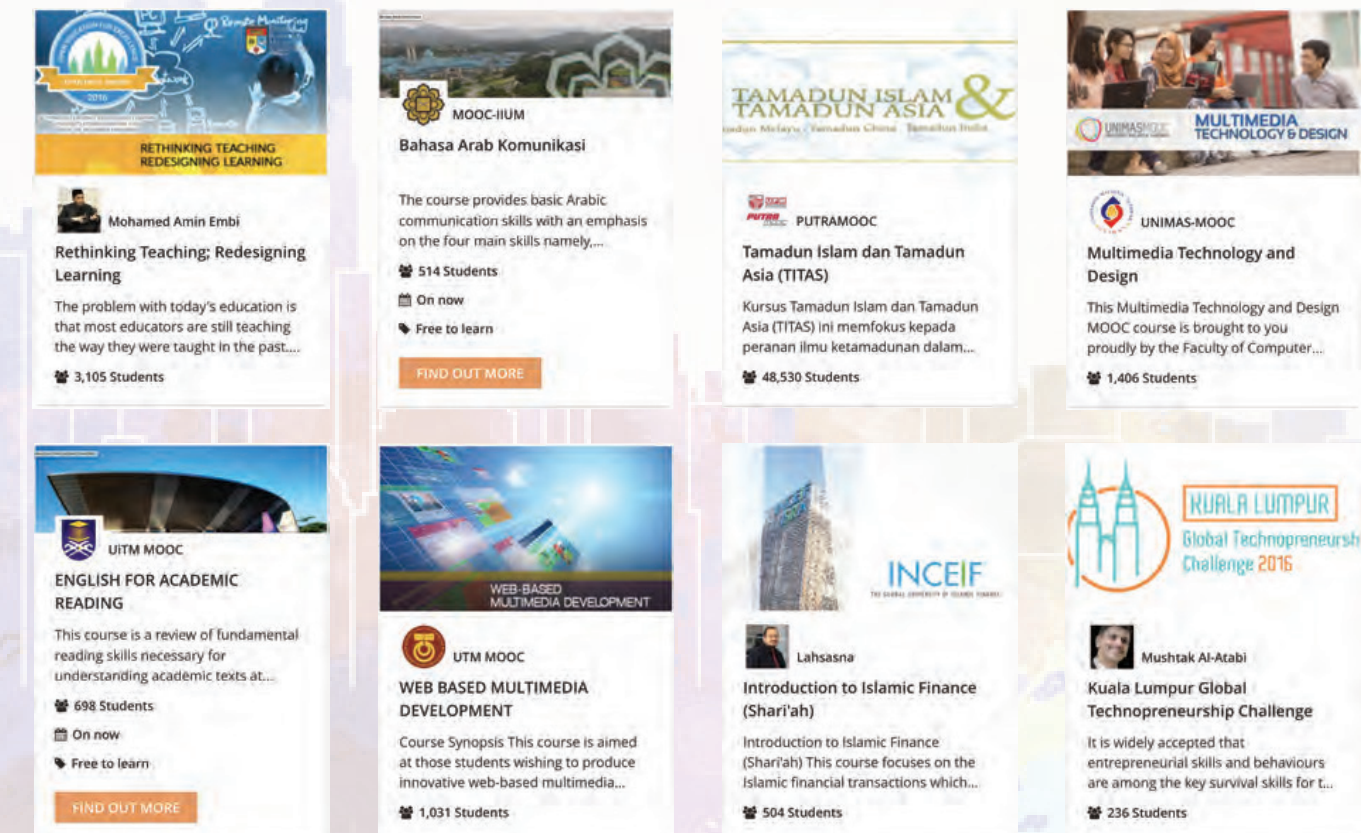
Universiti Malaya (UM)
- Bachelor in Visual Arts Studies



Have Internet, Will Learn

In line with Shift 9 MEB (HE) 'Globalised Online Learning', in September 2015 the Ministry launched 'Malaysia MOOCs', the world's first nationally coordinated online learning initiative. Malaysia MOOCs is intended to encourage online learning among Malaysians and diversify the classroom experience. In September 2016, the Malaysian Qualifications Agency (MQA) released guidelines on awarding credits for MOOCs programmes, enabling anyone who completes a MOOC to obtain credits and transfer them to formal academic

programmes. This could lead to shorter duration of studies and savings on tuition fees. Accredited MOOCs need not originate from Malaysia and can be from international MOOCs providers – this encourages competition and empowers students by enabling them to obtain knowledge from diverse sources. This initiative is also in line with the Ministry's lifelong learning (anytime, anyone, anywhere) agenda, which is Shift 3 MEB (HE) 'A Nation of Lifelong Learners.'



(Source: OpenLearning @ www.openlearning.com)



Enculturing Lifelong Learning

The Accreditation of Prior Experiential Learning (APEL) initiative was introduced by the Malaysian Qualifications Agency (MQA) to encourage lifelong learning and to widen higher education accessibility to Malaysians. APEL recognises prior experiential learning, which includes work and relevant experiences as qualifications to enter university. APEL can also be used to gain credit exemptions

once in university. Individuals who have never furthered their studies at the tertiary level can now do so in a shorter time span and with saved tuition costs. APEL, which falls within Shift 3 MEB (HE) 'A Nation of Lifelong Learners', seeks to enculture lifelong learning and remind Malaysians that one is never too old to learn a new skill or obtain new qualifications.



Micheal Veerapan



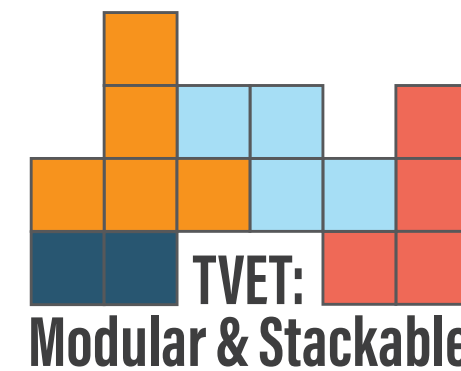
Raja Zulkarnain



Lai Chai Gim



Eizaz Azhar



Empowering the Acquisition of Skills

A dynamic and flexible education system is one that empowers its learners with choice. In the skills sector, providing this choice is especially vital in view of the many areas where skills can be gained – and – applied. From learning skills such as cooking to plumbing, to using digital platforms such as the internet or even 'apps' to promote services and expand market reach, there is no right or wrong pathway when it comes to the assimilation of these

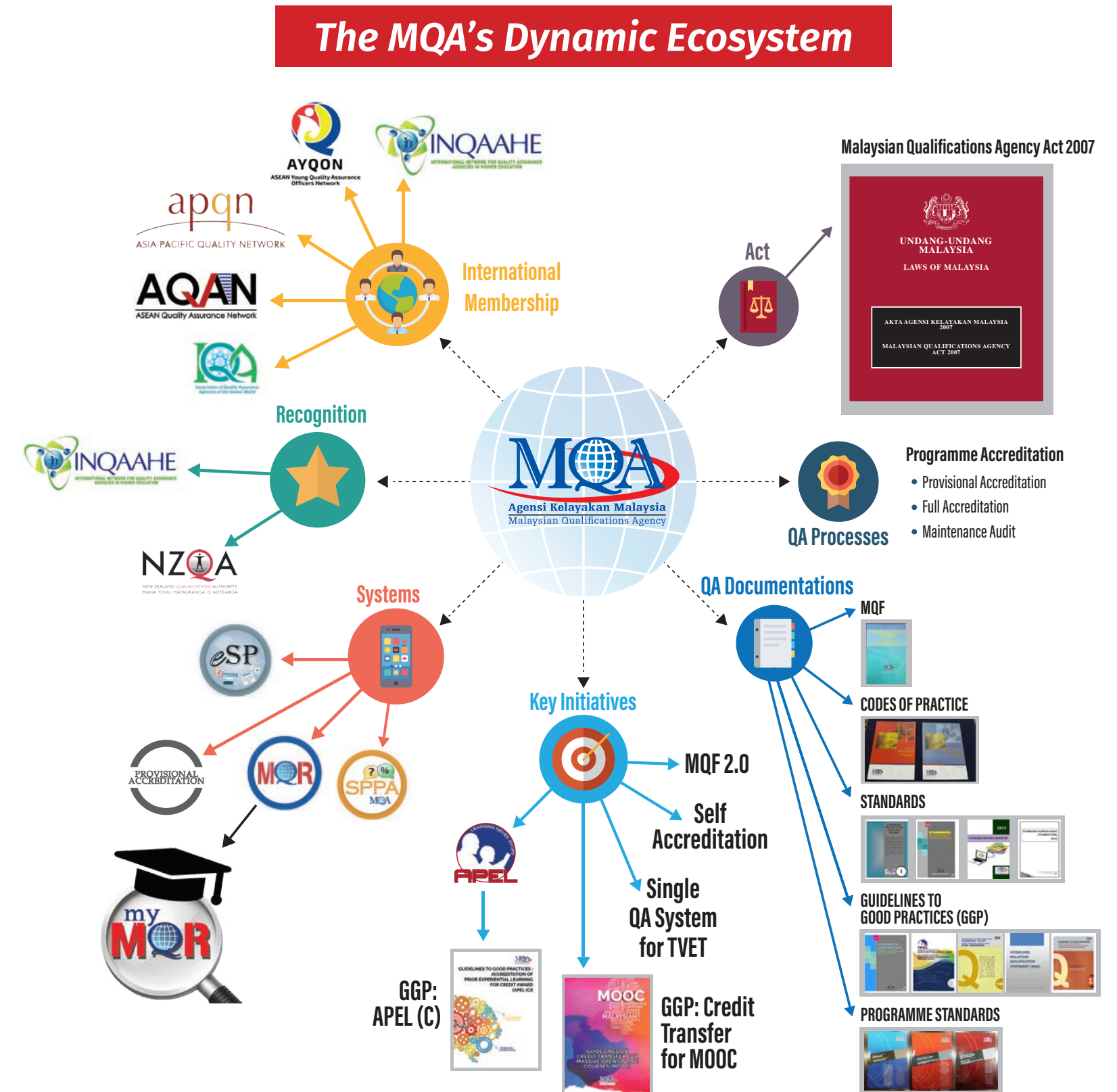
forms of skills and knowledge. Thus, these TVET courses offered by the Ministry are both modular and stackable in that individuals can choose the skills and knowledge that they desire, while spreading out the time in which they acquire them, based on their level of readiness, experience and need. This approach to higher education is in line with Shifts 3 (Nation of Lifelong Learners), 4 (Quality TVET Graduate), and 7 (Innovation Ecosystem) of the MEB (HE).





The Malaysian Qualifications Agency (MQA), an organisation under the Ministry of Higher Education Malaysia, is "... the national body to implement the Malaysian Qualifications Framework, to accredit higher educational programmes and qualifications, to supervise and regulate the quality and standard of higher education providers, to establish and maintain the Malaysian Qualifications Register and to provide for related matters"

(Malaysian Qualifications Agency Act 2007)



First national QA body in Southeast Asia to be certified as aligned with the international good practices in QA



(Based in Barcelona, Spain)

Guidelines of Good Practice (GGP)

**Internationally recognised from
26 September 2014 - 25 September 2019**

MQA is the first national quality assurance (QA) body in Southeast Asia whose policies and practices are certified as 'comprehensively aligned with INQAAHE Guidelines of Good Practice'. INQAAHE, or International Network for Quality Assurance Agencies in Higher Education, is a world-wide association of approximately 300 organisations active in the theory and practice of QA. INQAAHE's recognition of the MQA is indicative of its commitment towards the highest standards of QA in higher education in Malaysia and internationally.

Leading the young QA officers



Mrs. Siti Elija Jamaluddin, from MQA's Public and International Affairs Unit, is currently the President of the ASEAN Young Quality Assurance Officer's Network (AYQON) executive committee. AYQON which was established in 2015 is a platform to enhance networking among the next generation of QA officers from around ASEAN.



MQA - member in the Drafting Committee for the Global Convention on the Recognition of Higher Education Qualifications



In 2016, Prof. Dr. Rujhan Mustafa, CEO of MQA was appointed as a member of UNESCO's Drafting Committee for a Global Convention on the Recognition of Higher Education Qualifications, representing Asia and the Pacific region. The committee's objectives include to harmonise international higher education qualifications recognition standards with the aim of enhancing student mobility, providing a better quality of education, and to raise the standard of teaching and learning worldwide.



International Membership



The ASEAN Quality Assurance Network (AQAN) is an ASEAN affiliated entity headquartered at MQA whose aim is to forge closer collaboration between national QA bodies in the advancement of their QA policies and practices. MQA was the founding President and currently the Secretary of AQAN.



The Association of Quality Assurance Agencies in the Islamic World (IQA) where MQA was the founding President and currently a board member, brings together QA bodies in the Islamic world to develop mutual understanding and recognition of QA systems and practices.

MQA is also an active member of:



Malaysian Qualifications Framework 2.0

The decade old Malaysian Qualifications Framework (MQF) is undergoing a review in line with the current developments in higher education which focuses on preparing graduates for the 4th industrial revolution. This review also aims to align the MQF to the regional and international frameworks. It also consolidates the skills and technical sectors into a single technical and vocational (TVET) sector taking cognizance of the importance of TVET in higher education and work place.



Self-Accreditation

In accordance with a performance-based QA system championed by MQA, universities which demonstrate a record of strong and robust internal quality assurance systems are invited, evaluated and awarded self-accreditation status. Five public universities and four foreign branch campuses have been awarded with this status since 2010, which empowers these institutions to accredit their programmes.



(As of January 2017)

Technical Vocational Education & Training (TVET)

In line with the 11th Malaysia Plan (2016-2020) and the Malaysia Education Blueprint 2015-2025 (Higher Education), MQA leads the creation of a single QA system for technical, vocational and skills sectors in Malaysia. A national Technical and Vocational Education and Training (TVET) standard is nearing completion, which aims to mainstream TVET education in the country, making Malaysian TVET internationally desirable and competitive.



Best performer in Quality Assurance & Recognition Policy

		Overall Score	Openness	Quality Assurance & Recognition	Access & Sustainability
	Malaysia	VERY HIGH	VERY HIGH	VERY HIGH	VERY HIGH
	Germany	VERY HIGH	VERY HIGH	VERY HIGH	VERY HIGH
	Australia	LOW	HIGH	VERY HIGH	HIGH
	China	HIGH	VERY HIGH	LOW	VERY HIGH
	Indonesia	HIGH	HIGH	LOW	VERY HIGH
	Thailand	HIGH	HIGH	LOW	VERY HIGH
	United Kingdom	VERY HIGH	VERY HIGH	VERY HIGH	HIGH
	United States	HIGH	HIGH	LOW	HIGH
	Vietnam	HIGH	HIGH	HIGH	HIGH

Source: The Shape of Global Higher Education Report by British Council

A British Council survey on “Shape of Global Higher Education: National Policies Framework for International Engagement” has named Malaysia as the best performer in national policies on quality assurance and recognition, along with Germany, Australia, and United Kingdom.

Enhancing information accessibility through technology



As part of its efforts to enhance information access and dissemination, the MQA maintains the Malaysian Qualifications Register (MQR) which is the national registry of accredited qualifications. The MQR is accessible online at www2.mqa.gov.my. In 2016, MQA introduced a mobile application 'myMQR' to increase accessibility of information. As of January 2017, more than 11,000 programmes of all level of qualifications, which includes approximately 600 foreign programmes offered by Malaysian higher education institutions and providers are listed in the MQR.

Download Free MyMQR App



MQA also maintains a Provisional Accreditation List (PAL), which is accessible at www2.mqa.gov.my/pasp/. Provisional accreditation is a "candidacy assessment" to determine the strength of the curriculum and the readiness of its delivery support system before it is offered to the public. These provisionally accredited programmes, in due time, will be assessed for full accreditation.

MQA Training Centre

With over two decades of experience in quality assurance, MQA is ready to share its knowledge and experiences with other aspiring QA bodies, in and outside the region. Please contact us at atiqah@mqa.gov.my (Ms Nurul Atiqah Mohd Hanapiah) for further assistance.



MQA Global Network

Reflecting the transnational nature of QA in higher education, MQA has developed and maintained formal alliances with growing networks of QA bodies, such collaborations are deemed necessary to appreciate the national and international practices in managing our QA system.



RECOGNITION

In this chapter, we highlight various forms of recognition received by Malaysia's higher education institutions, researchers, students, alumni, and more. From university rankings to student success stories, research outcomes to skills competitions, such recognition comes from an array of higher education stakeholders and peers globally. At an era where higher education is becoming more competitive and institutions are improving continuously, we are proud that we have been able to compete with the best and have achieved various successes to motivate us as we move ahead.







Continuous Improvements in the World Rankings



Global rankings serve as a useful yardstick as to where an education system's strengths lie and how it can improve. As higher education becomes more globalised and accessible, the competition for international students becomes greater. Rankings, therefore, are an important reference point for governments, parents, and students to make informed decisions on the potential higher education destinations. At the national level, rankings are a source of pride and prestige. A local university that ranks well is able to instil confidence in the institution, enabling it to attract the best teaching talent and students, obtain support for research endeavours, and engage in high-impact collaborations with industries. Rankings are one of the many measures the Ministry monitors in shaping and guiding its higher education system.

According to QS World University Rankings 2015/2016, Malaysian universities are climbing up the ranks. Our foremost university, University of Malaya (UM) has broken the top 150 barrier to rank as the 133rd best university in the world. Universiti Teknologi Malaysia (UTM) and Universiti Kebangsaan Malaysia (UKM) have also seen continuous improvements in their world rankings, rising to the 288th and 302nd spots respectively. Special recognition should also be given to University Putra Malaysia (UPM) which climbed a tremendous 61 spots from 331st to be ranked 270th in the world.

UNIVERSITY	2015	2016
 UNIVERSITY OF MALAYA	146	<div>↑13</div> <div></div> 133
 UPM UNIVERSITI PUTRA MALAYSIA	331	<div>↑61</div> <div></div> 270
 UTM UNIVERSITI TEKNOLOGI MALAYSIA	303	<div>↑15</div> <div></div> 288
 UNIVERSITI KEBANGSAAN MALAYSIA The National University of Malaysia	312	<div>↑10</div> <div></div> 302



Top 1% in the World, Malaysian Research Universities

Based on the current world university rankings, Malaysia's research universities are among the top 1% best universities in the world out of approximately 30,000 universities worldwide. It is Malaysia's aim to have at least two local universities being ranked world's top 100 by 2025. If past trends are indicators of what is to come, we are certainly on the right track to achieve this target.




1		Massachusetts Institute of Technology (MIT)	
6		University of Oxford	
12		National University of Singapore (NUS)	
65		Monash University	
75		The University of Nottingham	

OUR AIM
By 2025:
2 universities in Top 100





133 Universiti Malaya

135		Kyushu University	
140		Cardiff University	
175		University of Reading	
214		Georgetown University	
249		National University of Ireland, Galway	
252		Chulalongkorn University	
252		RMIT University	


270 Universiti Putra Malaysia

276		Queensland University of Technology (QUT)	
288		University of South Australia	


288 Universiti Teknologi Malaysia

291		University of Ottawa	
296		University of California, Santa Cruz	

302 Universiti Kebangsaan Malaysia

325		Universitas Indonesia	
327		Heriot Watt University	

330 Universiti Sains Malaysia

363		George Washington University	
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Universiti Putra Malaysia

Top 50 universities under
50 years old



The QS World University Rankings: Top 50 Under 50 benchmarks the rising stars of the higher education world. In 2016, four Malaysian public universities appeared in the list, with UPM leading the pack at 17th position.

UNIVERSITY		RANK
 UNIVERSITI PUTRA MALAYSIA		17
 UNIVERSITI TEKNOLOGI MALAYSIA		25
 UNIVERSITI KEBANGSAAN MALAYSIA		26
 UNIVERSITI SAINS MALAYSIA		33



Universiti Teknologi Malaysia

Malaysian universities making their mark in Asia



In 2016 UM ranked the 27th best university in Asia. This marks its third consecutive rise in the rankings from 33rd in 2013, 32nd in 2014, and 29th in 2015. UPM on the other hand jumped an astounding 17 places from 66th to be ranked 49th in Asia – the first time it has stormed into Asia’s top 50. In total, 10 Malaysian universities are ranked within Asia’s top 200, including two private universities, namely Universiti Teknologi Petronas (UTP) and Taylor’s University.

UNIVERSITY		2015	2016
TOP 50	UNIVERSITY OF MALAYA UNIVERSITI MALAYA	29	↑ 27
	UNIVERSITI PUTRA MALAYSIA	66	↑ 49
TOP 100	UNIVERSITI SAINS MALAYSIA	49	↓ 51
	UNIVERSITI KEBANGSAAN MALAYSIA National University of Malaysia	56	↑ 55
	UNIVERSITI TEKNOLOGI MALAYSIA	61	↓ 63
	UNIVERSITI TEKNOLOGI PETRONAS	151	↑ 127
	UNIVERSITI UTARA MALAYSIA	191	↑ 137
	INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA	151	= 151
	TAYLOR'S UNIVERSITY Wisdom • Integrity • Excellence	201	↑ 179
	UNIVERSITI TEKNOLOGI MARA	201	↑ 181



University of Malaysia

Eleven subjects in the World's Top 50, a first for Malaysia



For the first time in Malaysia’s Higher Education history, eleven subjects were ranked in the world’s top 50, an increase from just three subjects last year. As universities become more niche, it is vital for them to have stand out offerings, and Malaysia’s universities have certainly excelled in specific areas of knowledge. For example, UM leads the way with five subjects in the top 50, three of which are in engineering (electronic and electrical, mechanical, and chemical). Taylor’s University is ranked 29th in the world for hospitality and leisure management – a first for a private university, whereas the International Islamic University Malaysia (IIUM) is ranked 46th for theology, divinity, and religious studies. As we expand the list, we have a total of 52 subjects in the world’s top 100.

Top 50



2017	SUBJECT
23 rd	ELECTRONIC & ELECTRICAL ENGINEERING
26 th	DEVELOPMENT STUDIES
33 rd	MECHANICAL ENGINEERING
38 th	CHEMICAL ENGINEERING
41 st	EDUCATION



2017	SUBJECT
32 nd	HOSPITALITY & LEISURE MANAGEMENT
35 th	MINERAL & MINING
38 th	CHEMICAL ENGINEERING
49 th	ENVIRONMENTAL SCIENCES



2017	SUBJECT
29 th	HOSPITALITY & LEISURE MANAGEMENT



2017	SUBJECT
46 th	THEOLOGY, DIVINITY & RELIGIOUS STUDIES

Fifty-Two subjects ranked Top 100 in the world

INSTITUTION	NO. OF TOP 100 SUBJECTS	BEST SUBJECT	RANK
UNIVERSITY OF MALAYA	19	ELECTRONIC & ELECTRICAL ENGINEERING	23 rd
USM APEX™	13	HOSPITALITY & LEISURE MANAGEMENT	32 nd
UNIVERSITI KEBANGSAAN MALAYSIA National University of Malaysia	9	[NINE SUBJECTS]	51-100
UTM UNIVERSITI TEKNOLOGI MALAYSIA	6	[SIX SUBJECTS]	51-100
UPM UNIVERSITI PUTRAJAYA	3	[THREE SUBJECTS]	51-100
TAYLOR'S UNIVERSITY Widelen - Integrity - Excellence	1	HOSPITALITY & LEISURE MANAGEMENT	29 th
الجامعة الإسلامية العالمية ماليزيا INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA بوتيموسيلي الشارعة الاسلامية مليزيا	1	THEOLOGY, DIVINITY & RELIGIOUS STUDIES	46 th

No. 1 in Islamic Banking



According to the SCOPUS database, IIUM ranks No. 1 for the publication of Islamic banking and finance research papers (11% of the world’s total).



Top in ISI Index



According to the ICD-Thomson Reuters Islamic Finance Development Report released in November 2014, INCEIF is the top contributor in research for Islamic Finance degree and courses. As the world’s economic and conventional banking systems face various challenges, Islamic banking and finance has emerged as an attractive alternative. Recognising this, Malaysian institutions are at the forefront of Islamic banking and finance development and growth worldwide.



Private Universities are also Soaring Upwards

Our private higher education providers as very much part and parcel of the “Soaring Upwards” narrative as they too are improving. Taylor’s University has, for the first time cracked the world’s top 50, placing 29th for Hospitality and Leisure

Management. Universiti Teknologi Petronas (UTP) and Multimedia University (MMU) also continue to improve their ranking from the past year.

QS Asia Rankings 2016

UNIVERSITY	2015	2016
UNIVERSITI TEKNOLOGI PETRONAS	151	127
TAYLOR'S UNIVERSITY Wisdom · Integrity · Excellence	201-250	179
MMU® MULTIMEDIA UNIVERSITY	201-250	193
LIMKOKWING UNIVERSITY OF CREATIVE TECHNOLOGY	251-300	
UNIVERSITI TENAGA NASIONAL	251-300	
UTAR UNIVERSITI TUNKU ABU BAKAR	251-300	

QS By Subject Rankings 2016/17

UNIVERSITI TEKNOLOGI PETRONAS	
#101-150	Engineering - Chemical
#151-200	Engineering - Mechanical
#151-200	Engineering - Electrical & Electronic
#251-300	Computer Science & Information Systems
TAYLOR'S UNIVERSITY Wisdom · Integrity · Excellence	
#29TH	Hospitality & Leisure Management
MMU® MULTIMEDIA UNIVERSITY	
#151-200	Engineering - Electrical & Electronic
#301-350	Computer Science & Information Systems

QS Star Rating 2016

UNIVERSITI TEKNOLOGI PETRONAS
★★★★★

msu
management & science university
★★★★★

SUNWAY UNIVERSITY
★★★★★

Malaysia's Research Landscape increased by 594% over the last 10 years

The ASEAN Research Landscape Report, published by Thomson Reuters, highlights Malaysia as the leading research and publications powerhouse in the ASEAN region.

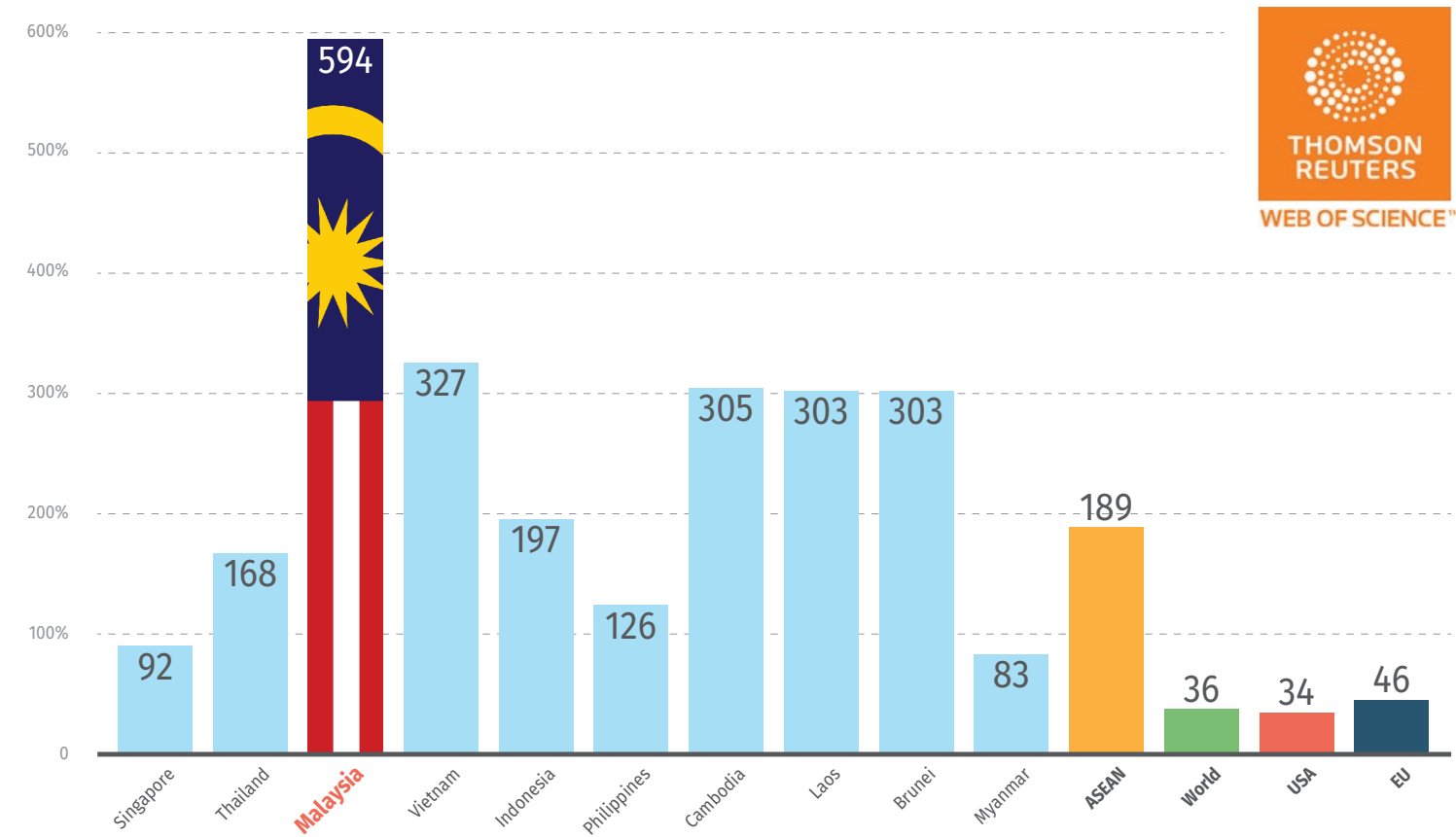
Over the last decade, Malaysia increased its research output by almost six-fold, and this, according to Elsevier, the world's largest database of intellectual material, has coincided with Malaysia overtaking both Singapore and Thailand in terms of knowledge output.

Contributing to this was the initiation of the research universities project, which witnessed 5 Malaysian universities being granted with research university status (these universities are UM, USM, UKM, UPM, and UKM).

Collectively, the research universities have contributed about 70% of all Malaysian publications, a 40% increase in the number of patents filed, 4 times increase in citations, and have generated RM 1.25 billion (approximately \$ 300 million) in income from the industry, NGOs and agency consultations.

The research universities project has successfully encultured research and development in Malaysia, and increased innovation. The next priority area will be 'Translational Research', i.e. to ensure that research goes beyond publications and journals, and impacting local and international communities in beneficial and meaningful ways.

Growth in Research Output - last 10 years.



The Bionic Prosthetic: Enhancing amputee's quality of lives



Researchers from UM's Centre for Biomechanics (CACB), Photonics Research group, and the Faculty of Engineering under the leadership of Prof. Ir. Dr. Noor Azuan Abu Osman initiated the "Ekspedisi Kasih Bionik" (Bionic Care Expedition Project).

The Project involved the creation of a new type of prosthetic - one that was more comfortable, durable and suitable for long-distance cycling. The prosthetic produced was nicknamed the "bionic prosthetic".

One of the recipients of the bionic prosthetic was Azman Yeop Akil who lost his right leg in an accident. In 2013, he entered the Malaysian Book of Records as the first disabled Malaysian to cycle over 1000 kilometres.



Membrane Technology: Creating a cleaner Malaysia



Professor Dr. Abdul Latif Ahmad of USM is a leading expert in membrane technology. His work in the field, spanning a period of over 20 years, recently gained him recognition as one of the 'World's Most Influential Scientific Minds' by Clarivate Analytics (formerly known as Thomson Reuters).

While membrane technology may not be something we usually hear of, it is important for societal sustainability. Membranes are filters that are able to separate small ions and molecules that can be used to treat sewerage waste from industry to ensure that it does not pollute the environment.

Currently, the technology is being used to solve river pollution locally and internationally.

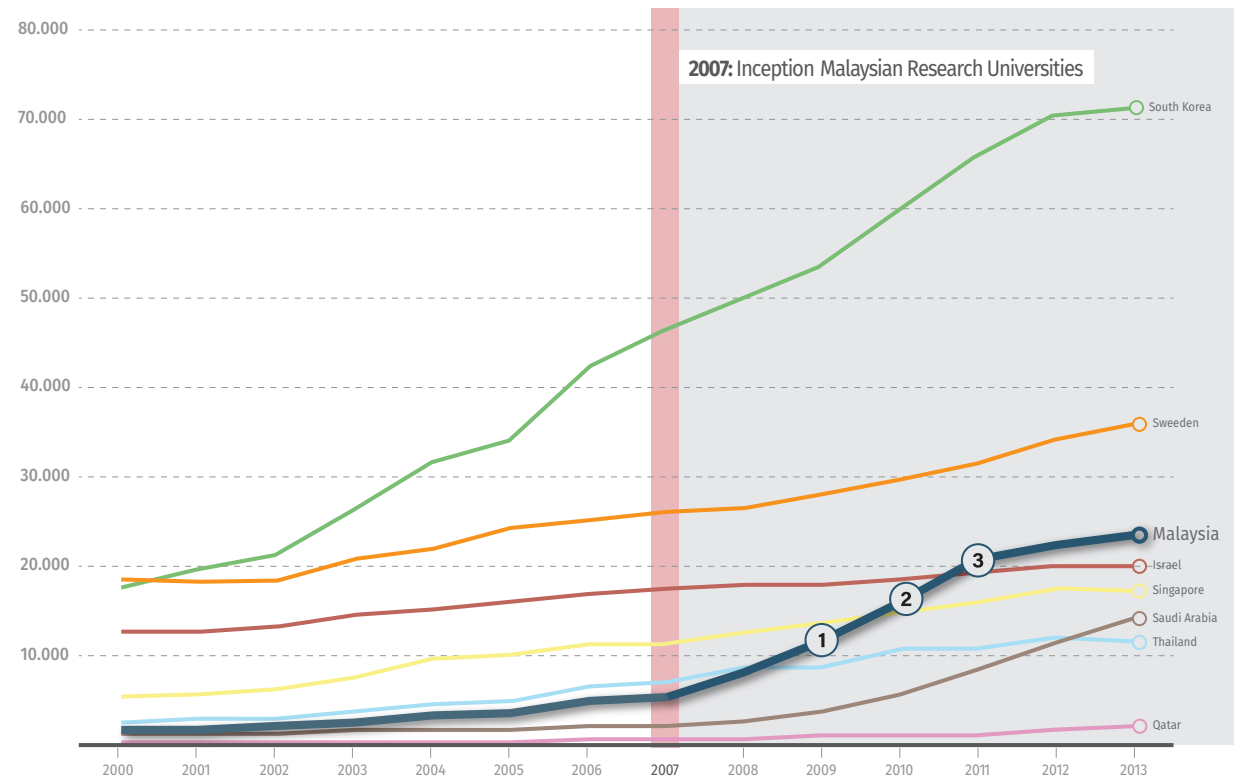


Malaysia Research and Publications: The Highest Leap in the World

The inception of the research universities project in 2007 has enabled Malaysia's higher education system to enculture R&D. The Malaysian government's investments in R&D have also shown impressive returns in terms citation numbers, patents and wealth creation. This includes:

- **3.1x increase in publications (highest in the world).**
- **In 2009, we overtook Thailand and in 2011, we overtook Singapore for knowledge output.**
- **4.0x increase in citations.**
- **70% of Malaysian university publications are contributed by the research universities**
- **40% growth in patents filed.**
- **RM1.25 billion income generated by research universities from the industry, NGOs & agency consultations.**

Research is vital for (i) the generating of fundamental knowledge, and (ii) the commercialisation of products. Generating fundamental knowledge is important to enhance the body of knowledge in all disciplines – be it in the humanities or sciences, while commercialising products contributes towards generating income for the nation. Both provide impact and benefit to the community and are integral to Malaysia's development.



Chicken & Vaccines: No fowl-play



Profesor Datin Paduka Dr. Aini Ideris led a research team from Universiti Putra Malaysia to research on respiratory illnesses and avian immunosuppression, leading to the development of the Newcastle Disease Vaccine and the Fowl Pox Vaccine.

The work has been recognized by the international science community and it is a prime example of the transfer of technology from the university to the industry. Both vaccines have been commercialised and sold across the ASEAN region, in countries like China and to the UNDP project nations of Kenya, Mozambique and Nigeria.



Attracting students worldwide with MOOC



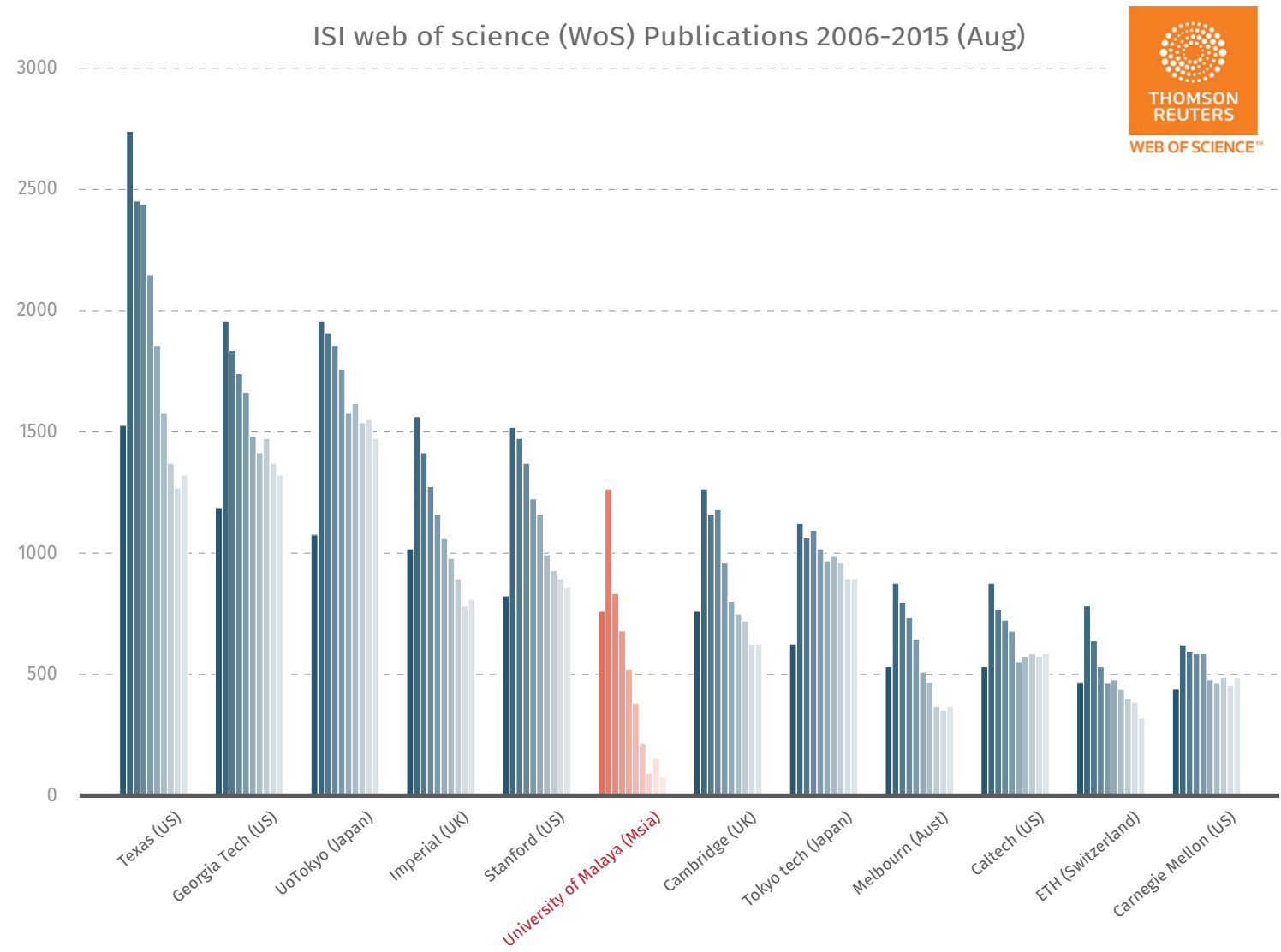
Professor Dr. Mushtak Al-Atabi is a MOOCs (Massive Open Online Courses) pioneer in Malaysia. In March 2013, while attached to Taylor's University, his first MOOC on Entrepreneurship (which coincidentally was also the first MOOC in Malaysia) went live and has to date attracted more than 3,500 students from 145 different countries. In 2016 he joined Heriot-Watt University Malaysia Campus as its Senior Deputy Provost.

The world's top universities such as MIT and Harvard also offer MOOCs. EdX and Coursera are examples of famous MOOCs platforms. Since September 2015, Malaysia has its own national level MOOCs initiative known as 'Malaysia MOOCs'.



Engineering at University of Malaya: High-Impact Research & Publications

UM's rise in subject rankings coincides with the increased number of high-impact publications it currently has in the ISI Web of Science database, placing it ahead of other well-established universities.



CIGMIT, UM MEDICAL CENTRE



MOST AFFORDABLE CITY IN THE WORLD FOR STUDENTS

QS BEST STUDENT CITIES SURVEY 2013/14, 2015/16 & 2016/17

Kuala Lumpur was voted as Most Affordable City in the World for Students in the QS Best Student Cities Survey 2016/17. This was the second time Malaysia's capital city had received such recognition, the first being in 2013/2014, the second in 2015/16. According to UNESCO, Malaysia not only offers quality and value for money education, but also good quality of life. From international schools to higher education

institutions, Malaysia is currently home to more than 170,000 international students from more than 150 countries around the world. In a May 2016 report by the British Council titled 'The Shape of Global Higher Education', Malaysia and Germany were said to be 'the two countries above any others (to) have the most balanced portfolio of providing high-level support for international engagement'.

International Universities have confidence in Malaysia's Higher Education sector

Malaysia is home to the largest number of leading foreign universities branch campuses in Asia. This consists of five British institutions (the largest number of British branch campuses outside of the United Kingdom), the first Chinese public university to be opened outside of China, and two institutions ranked top 100 in the world. The establishment

of the Asia School of Business (ASB), a collaborative effort between the MIT Sloan School of Management and the Central Bank of Malaysia in 2015 is testament to Malaysia's growing reputation as a destination for quality higher education, not only in this region but also throughout the world.



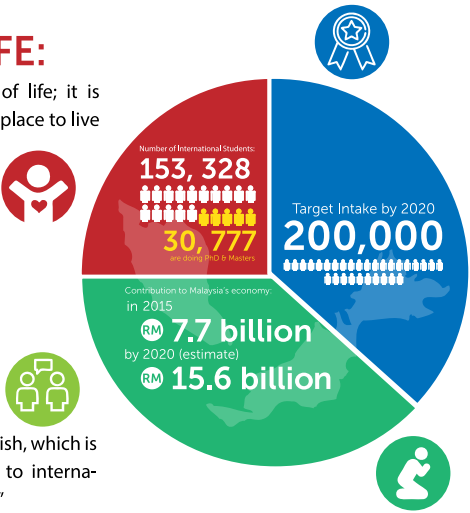
Attracting International Talent From Around The World

Under the Malaysia Education Blueprint 2015-2025 (Higher Education), Malaysia aims to attract 250,000 international students by 2025. As of 31 December 2016 there were 172,886 international students in Malaysian universities, private and international schools, as well as language centres. Of this amount, approximately 23% of international students in our universities are pursuing postgraduate degrees. This indicates adequate and competent research opportunities for current and potential international students as well as education opportunities at all education levels. In 2012, the Malaysian government set up Education Malaysia Global Services (EMGS) to facilitate and improve international student management processes. EMGS acts as a one-stop centre for prospective students to obtain information and find out more about what Malaysia has to offer. As we grow, we are confident that we can provide high quality education as well as student-friendly services for all.

**QUALITY
(VALUE FOR MONEY):**
“Not only are costs relatively low, but the quality of Malaysian higher education is seen to be good, yielding a growing perception that higher education in Malaysia represents value for money.”

QUALITY OF LIFE:

‘Malaysia offers a good quality of life; it is widely regarded as a comfortable place to live and study.’



LANGUAGE OF INSTRUCTION:

‘Most instruction is offered in English, which is viewed as offering better access to international employment opportunities.’

CULTURAL COMFORT:
“Malaysia is a melting pot for culture. It provides a friendly environment for students. For example, Muslim students can study in a country where Islamic valued and practices are understood, widely shared and respected



SOURCE: HIGHER EDUCATION IN ASIA: EXPANDING OUT, EXPANDING UP, BY UNESCO
<http://www.uis.unesco.org/Education/Pages/higher-education-asia-report.aspx>



THE WORLD'S MOST INFLUENTIAL SCIENTIFIC MINDS

2014-2016



Professor Dr. Abdul Latif Ahmad
Chemical Engineering



Professor Dr. Saidur Rahman
Engineering



Professor Dr. Ishak Hashim
School of Mathematical Sciences
Science & Technology



Professor Dato' Ir. Dr. Wan Ramli
Engineering



Professor Dr. Bassim H. Hameed
Chemical Engineering



Professor Dr. Siti Kartom Kamarudin
Engineering



TOP 1% GLOBALLY CITED RESEARCHERS



Malaysia's Research Star Award 2016

Recognition by:

Clarivate Analytics

Formerly the IP & Science business of Thomson Reuters



RECOGNITION BY CLARIVATE ANALYTICS

★ Frontier Researcher



Prof. Dr. Zainal Salam



Prof. Dr. Jinap Selamat



Prof. Dr. Ahmad Fauzi Ismail



Prof. Dr. Ishak Ahmad



Dr. Cha Hang Seng

★ Young Researcher



Prof. Ir. Dr. Sharifah Rafidah



Prof. Dr. Lee Keat Teong



Dr. Ong Hwai Chyuan



Prof. Madya Dr. Lim Hong Ngee



Dr. Huang Nay Ming

★ Highly Cited Review



Prof. Dr. Wan Saime Wan Ngah



Prof. Dato' Ir. Dr. Wan Ramli



Prof. Ir. Dr. Mohd Ali Hashim



Prof. Ir. Dr. Siti Kartom

RECOGNITION BY ELSEVIER

★ International Collaboration



Prof. Dr. Nasrudin Abd Rahim



Prof. Dr. Sulaiman Wadi Harun



Prof. Dr. Mohd Rafi Yusop

★ Women in the Science



Prof. Dr. Azah Mohamed



Prof. Ir. Dr. Zahira Yaakob



Prof. Madya Dr. Suzana Yusop

Finding new ways to educate the world

MALAYSIA MOOC
MASSIVE OPEN ONLINE COURSES

Professor Dato' Dr. Mohamed Amin bin Embi was presented two awards recently by the Open Education Consortium (OEC) at the Open Education Excellence Awards Ceremony in Poland.

The first was the 'Individual Educator's Award' which he received for his contributions to open education over the last 15 years. He is the first Muslim and Malaysian as well as one of only two people in the world to receive it.

Prof Amin's second award was the 'Open MOOCs Award'. Prof Amin's MOOC titled 'Rethinking Learning, Redesigning Teaching' was selected as one of the best MOOCs in the world. More than 2000 students and teachers from over 80 countries all over the world have taken the course which is available for free at OpenLearning.com

14.04.2016, Kraków, Poland



OPEN EDUCATION CONSORTIUM

The Global Network for Open Education



2015 & 2016 Cambridge Intervarsity Debate Champions



Debating requires confidence, the ability to think on your feet, and the ability to express ideas coherently and eloquently on various topics. Although there is a general perception that Asians do not excel in the field of debating, the achievements of Malaysian students from two local universities prove otherwise.

UiTM deserves a special mention as it was the first Malaysian university in history to win the main category of the prestigious Cambridge Intervarsity Debate competition in 2015. En route to victory, the team consisting of Mifzal Mohammad and Jasmine Ho Abdullah beat favourites like Oxford University, Harvard and the London School of Economics.

In 2016, debaters Ameera Natasha Moore and Mubarrat Wassey from the International Islamic University Malaysia (IIUM) made it two-in-a-row for Malaysia by emerging victorious, beating Oxford and Toronto University in the final.



First Asian Champion in History of 41-year old Austral-Asian Debate Championship



Mubarrat Wassey, Ameera Natasha Moore and Sara Abd Rahim from IIUM were crowned as champions of the 41st Austral-Asian Debate Championship 2016 after defeating the University of Sydney in the grand final of the competition which was held in Perth, Australia. This is the first time in history that an Asian team emerged victorious in the main category. The team comprised both local and international students, namely from Bangladesh, Malaysia, and Afghanistan. This highlights the international nature of Malaysia's higher education system as well as the opportunities offered for students to excel in co-curricular activities.



New Heights in Engineering



Wan Nazri Wan Aria, an engineering faculty alumnus of Universiti Teknologi Mara (UiTM) was instrumental in the construction of the Mecca Clock Tower, aka the Abraj al-Bait. While working for a prestigious German engineering firm, he was appointed as the Mecca Clock Tower's Chief Structural Engineer. The clock tower, at 601 meters, is the tallest and largest in the world.



TVET Recognition for Quality Assurance & Standards



Malaysia's Department of Polytechnic Education made history when 8 of its polytechnics received the 'Gold Award' accreditation from the Asia Pacific Accreditation and Certification Commission (APACC) – the highest within the Asia Pacific region. The APACC, a regional accreditation body, was formed during the International Conference on Accreditation and Certification in December 2004 in Seoul, Korea with participants representing seventeen (17) member governments. Since its inception, APACC has received 110 applications from institutions of various member countries. Out of that, 43 have received accreditation ranging from bronze, silver and gold level. 8 polytechnics under the MOHE Malaysia are the only institutions having achieved the gold award.

The 8 polytechnics are:

- Politeknik Ungku Omar, Perak
- Politeknik Sultan Salahuddin Abdul Aziz Shah, Selangor
- Politeknik Ibrahim Sultan, Johor
- Politeknik Kota Bharu, Kelantan
- Politeknik Sultan Haji Ahmad Shah, Pahang
- Politeknik Seberang Perai, Pulau Pinang
- Politeknik Sultan Azlan Shah, Perak
- Politeknik Port Dickson, Negeri Sembilan

TVET initiatives under the 10th Malaysia Plan has improved public perception on TVET, resulting in a significant increase in TVET enrolment from 113,000 students in 2010 to 164,00 in 2013. Further emphasis is given to TVET under the 11th Malaysia Plan whereby intake of SPM leavers to TVET programmes is targeted to increase from 164,000 in 2013 to 225,000 in 2020. It is predicted that 600,000 new TVET-related jobs will be created by 2020, making skill-based professions a viable and lucrative alternative to more conventional academic-focused careers in the future.

World Champions of the 21st FIRA Roboworld Cup Beijing 2016



The Malaysian Polytechnic Robotics Team consisting of students from various polytechnics throughout the country recently emerged as overall champions at the 21st Federation of International Robot-soccer Association (FIRA) Roboworld

Cup in Beijing, China. The Malaysian team participated in the competition by winning 6 gold medals, 8 silver medals and 4 bronze medals. This prestigious international competition is held yearly to promote robotics technology and TVET.



Technically gifted



Two polytechnic students recently emerged as champions at the ASEAN Skills Competition 2016 (ASC 2016) in Selangor, Malaysia. The students, Aiman Syamil from the Tuanku Syed Sirajuddin Polytechnic, Perlis, won the 'Restaurant Service' category while Marufah Jailan, from the Ibrahim Sultan Polytechnic, Johor, won

the 'Fashion Technology' category. Both of them were able to apply the knowledge gained from their skills programmes to defeat their ASEAN counterparts and emerge victorious. Their victory qualifies them for the World Skills Competition 2017 which will be held in Abu Dhabi.



Sony World Photography Awards

Our Community Colleges are serious about ensuring excellence amongst their teaching staff. This is demonstrated by Hairul Azizi Harun, who teaches photography at one of the community colleges. Constantly aspiring to capture life's stories on camera, Hairul Azizi Harun won first place in the Malaysian National Award and the 2014 Sony World Photography Awards in the Split-Second Category. His winning entry was titled "Photography Story – Behind the Scene."

Captured in a village in Kuantan, Pahang, Malaysia, this image was taken in high shutter speed using only available light. It narrates the pains and gains of being a photographer, the heritage of an old house, forgotten traditional games and the old generation meeting the new, all of which complemented each other very well.



Community Colleges

MMC-Gamuda Internship Programme



On 24 August 2015, 17 students graduated from this two-year internship programme. These were students of the Sabak Bernam and Kuantan Community Colleges who received qualifications as Tunnel Mechanics and Tunnel Electricians.

As interns, they received skills training and hands-on experience at the MMC-Gamuda Tunnel Training Academy. All 17 students have since received employment offers to utilize their expertise at MRT project sites in the Klang Valley – just two years after SPM, with relatively lucrative starting salaries.

It is predicted that 600,000 new TVET-related jobs will be created by 2020, making skill-based professions a viable and lucrative alternative to more conventional academic-focused careers in the future.

TVET will no longer be seen as a second choice, but rather on par with any other educational pathway.



A Special Talent Cooking Up a Storm



Muhamad Saifuddin bin Rosli is a Selayang Community College student. He recently made the nation proud by emerging 5th in the cooking category at the 9th International Abilympics Federation (IAB) skills competition for persons with disabilities. Muhamad Saifudin suffers from a sight impairment but was able to cook up a fantastic meal that wooed the judges.



THANK YOU

“As we embark on our mission to redesign higher education, and as we receive recognition for the fruits of our labour, I would like to thank all higher education stakeholders including the researchers, lecturers, industry partners, alumni and students for their contributions.

My pledge is that the Ministry will deliver the best education in the world to all Malaysians and international students.



May our efforts be blessed and may we continue Soaring Upwards”



-Dato’ Seri Idris Jusoh, Minister of Higher Education



MINISTRY OF HIGHER EDUCATION

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