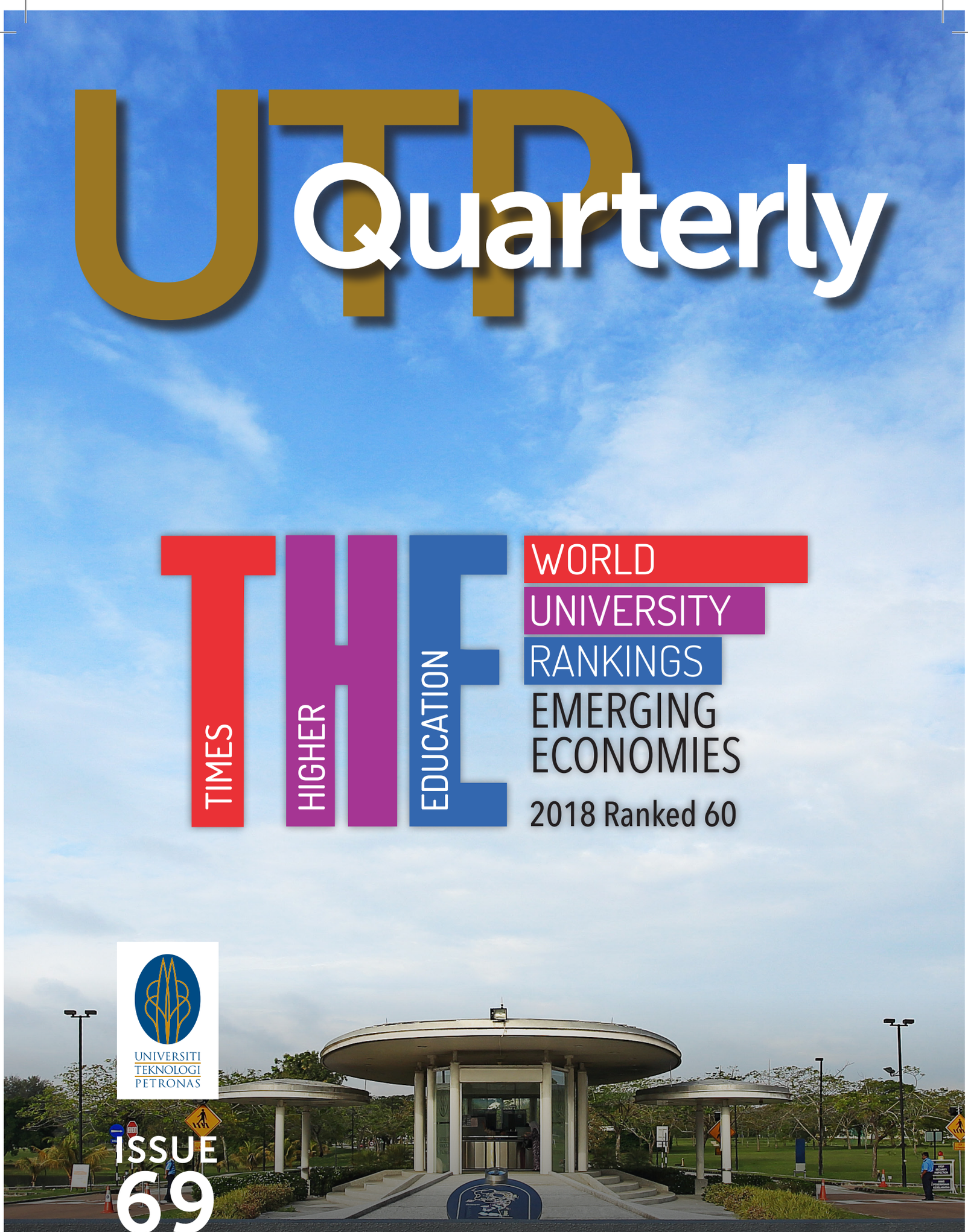
UTP Quarterly

TIMES HIGHER EDUCATION

WORLD UNIVERSITY RANKINGS

EMERGING ECONOMIES

2018 Ranked 60



UNIVERSITI TEKNOLOGI PETRONAS

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Message From The Vice Chancellor

It is a brand new year once more, in which we have to strive harder for the goals and aspirations that we have set for the university.

Our focus is to continue integrating UTP CAAIR Values (Collegiality, Accountability, Adaptability, Integrity, and Respect) in equipping our graduates for the career world, economy and nation. The university's development will be focused on Academics, Research and Innovation, Student Affairs as well as Alumni. These four key areas will not only nurture the students but will further strengthen UTP's position as one of the renowned private university in Malaysia.

I am glad and proud to see that UTP has continued to expand its strategical alliances with international counterparts as well as with industry players. As one of the keys to progress and development, these strategic alliances will bring mutual benefit to both UTP and the establishments we partner with, as we strive the graduates of the future and work together on new ideas, methods and innovations.



Prof Dr Mohamed Ibrahim Abdul Mutalib

Stepping into 2019 is a great pride to the UTP community with two exciting accomplishments-our significant climb up the Times Higher Education (THE) World University Rankings in Emerging Economies and induction of one of UTP's chemist into the renowned Periodic Table of Younger Chemists.

Nevertheless, we need to keep our eyes and minds on the goals and be resolute in our commitments towards realising them.

Lets make 2019 as a year of brand new achievements for UTP.

Climbing Up 'The Rankings' To Be Malaysia's Top Private University

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2018 Ranked 60

UTP made further inroads into the 2019 Times Higher Education (THE) Emerging Economies University Rankings, to be ranked at 60th place. This advancement of 31 places since the university made its debut in 2017 is testament to continuous improvement in the world pf academia.

This accolade has made UTP to be the top private university in Malaysia and best performing university in research among Malaysian universities with a score of 30.7.

Not resting on the laurels, UTP continues to focus its research the areas of Smart Communities and Energy Sustainability while ensuring the campus to develop and evolve to meet the needs of current and future students.

In line with Industry 4.0, UTP gears its students so they will be positioned as the forefront of emerging technologies and breakthroughs in the advancing fields of nanotechnology, artificial intelligence, robotics and the Internet of Things.

We are truly excited about what the future can bring for us as an institution of higher learning and for the graduates. This ranking is also a testament to the university's continuous endeavours in education and research projects.



Recognised By Jobstreet.com For High Employee Recommendation

UTP was recognised as a Jobstreet.com Preferred University, showcasing it as an institution that is highly recommended by employers in Malaysia.

This places the university among 10 private universities and 5 public universities in this esteemed group which is recognised for producing top and demand graduates. UTP met the qualifications for this recognition which were recognised by the government of Malaysia/Worldwide, meeting job market demand and supply, strong accreditation/ creditability in the industry and employer recommendation



Meet The First **Malaysian** On The Periodic Table Of Younger Chemists

UTP's very own research scientist Dr Magaret Sivapragasam now has her name on the prestigious Periodic Table of Younger Chemists by the International Union of Pure and Applied Chemistry (IUPAC).

The Periodic Table of Younger Chemists was created to celebrate the 100th anniversary of IUPAC and the International Day of the Periodic Table of Elements. The 118 elements of the Periodic Table is represented by 118 exceptional young chemist from around the world, emphasising career diversity, creativity and the dedication of the selected chemists in their work while representing IUPAC's mission and core values. She is distinguished as the sole and first Malaysian recipient and represents ytterbium (Yb), the 70th chemical element on the Periodic Table of Elements.

Dr Magaret is a postdoctoral research scientist at UTP's Centre of Research Ionic Liquids (CORIL). Her research focusses on employing ionic liquids as a due removal system and oil dispersant while studying their ecotoxicity profiles. In line with one of her main goals of curbing the issue of pollution in small villages in Malaysia, her projects include the removal of dye from industrial wastewater from the "batik" dyeing industry. Dr Magaret also won several awards such as Shell Ideas 360 Innovators Challenge (Stage 2) and the Honourable Mention by Yale University, USA during its Green Chemistry Video Challenge last year. She also received the Science Finder CAS Future Leader Award from the American Chemical Society.

Dr Margaret hopes her achievement will inspire young minds, especially women, to believe in themselves and strive for more while encouraging them to take up science related-courses.

Congratulations Dr Magaret! We look forward to share more of your successes.

Adding to Our **Gold** and **Silver Cache**



The Malaysia Technology Expo 2019 saw UTP bagging 5 gold medals and 1 silver medal, representing all the 6 products we submitted for the expo. On top of this, Associate Professor Dr Ahmad Majdi Abdul Rani with his team brought home The Best of the Best Award (Local Category) for the invention of Slip-on Sprocket hole while Associate Professor Ir Dr Hisham Mohammad was given The Best Award for his Smart Geo-Pipe invention.

This annual expo, held at Putra World Trade Centre (PWTC) aimed to serve as an avenue for local and international inventors to present their innovations for potential commercialisation.

Congratulations to all the winners!

UTP Co-Hosted APAiE 2019

UTP jointly hosted the 14th Asia-Pacific Association for International Education Conference & Exhibition 2019 (APAIE) held at Kuala Lumpur Convention Centre. With the theme 'Diversity and Inclusivity of Higher Education in the Asia Pacific', the conference brought together 2,500 experts from nearly twenty institutions, both local and international to discuss global issues and opportunities to network in the areas of academic, research and student mobility. It also aimed to promote the value of international education across the region and beyond.

APAIE 2019 was officiated by YB Teo Nie Ching, Deputy Minister of Education. The Permaisuri of Johor and Chancellor of Universiti Teknologi Malaysia (UTM), Raja Zarith Sofiah Binti Almarhum Sultan Idris Al Mutawakkil Alallahi Shah delivered a keynote address to urge all parties in improving diversity and inclusivity in higher education.

Minister of Education, YB Dr Maszlee Malik graced the APAIE 2019 Gala Dinner where UTP students were part of the performers. UTP's Vice Chancellor, Professor Dr Mohamed Ibrahim Abdul Mutalib took part in the APAIE 2019 Presidents' Roundtable Discussion to deliberate on the role of higher education in nation building, practices, policies and impacts to the ASEAN region.

UTP also hosted the APAIE Board Meeting chaired by APAIE's President, Professor Sarah Todd and organised two-day morning sessions and paper presentations. On the last day of the conference and exhibition, international guests were given the opportunity to visit and discover more of UTP in terms of its academic, research and students' activities.






Kompleks
Canselor


APAiE2019
MALAYSIA
25-29 March 2019
Diversity and Inclusivity
of Higher Education
in the Asia-Pacific



UTP Career Fair To Gear UP Graduates For IR 4.0



UTP's annual career fair- Technology, Education and Career 2019 (TEC 19) attracted more than 5,000 visitors over its two-days programme. 'Trailblazing Talents' was the theme - a fitting motion for soon to be graduates stepping into the working world.

TEC 19 saw the participation of some 50 companies including industry giants such as PETRONAS, Schlumberger, ExxonMobil, Hartalega, TechnipFMC, Sapura Energy, Top Gloves and Nestle, providing excellent opportunities for potential job and internship placements.

A programme organised by students for the students, TEC serves as a platform for both soft skill development and career advancement.

TEC includes walk-in interviews, career spotlights and resume-writing workshop. This year, the TEC 19 School Workshop was carried out. This workshop was carried out aimed to provide insights on the higher education pathways to secondary school students.

This workshop was attended by more than 200 students from nearly 10 schools from Peninsular Malaysia.









The 1st E-Sports Campus Tournament In Malaysia

UTP hosted the inaugural XPAX Kejohanan E-Sukan Kampus (KEK) 2019 in collaboration with Media Prima Digital. KEK 2019 gathered the electronic sports (e-sports) teams from local education institutions competing for prize money of RM 180, 000 in 3 games (Mobile Legends Bang Bang, Pro Evolution Soccer 2019 and DOTA 2. The quest for champion began at UTP as the host for the Northern Zone.

The top 48 varsity teams will be representing Northern Zone at the Grand Finals in April. The tournament included training and sharing on soft skills development, educational booths, career exhibition and gaming hackathon. The grand champion will be offered RM50,000 worth of team scholarship funded by XPAX.

One of the highlights of KEK 2019 would be XPAX Hackathon E-Sukan challenge where students presented their vision on cultivation of local e-sports industry. Local artists such as Naim Daniel and Nabila Razali, fitness coaches and technology experts were also present during the 3-day event.

KEK is expected to become the trendsetter for e-sports domain in Malaysia with all the higher learning institutions coming onboard to realise the aspiration of the country's Youth and Sports Minister, YB Tuan Syed Saddiq Syed Abdul Rahman.



Helping The Communit To FLY High





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We have set up the Desa Layang-Layang Kanan Community and Innovation Centre for the benefit of the local community. This centre was built from the contributions of companies, individuals, staff and students of UTP as well as the proceeds from the Perak Sultanate: The Historic Royal Glory of Perak Tengah book.

This centre, which also contains a mini library, will be a point of development and resources for the children and residents here towards developing the community.





Marching Ahead With Collabora









1. Iqra University, Pakistan

The two universities will work towards strengthening their research capabilities and building stronger academic reputations through rigorous networking. Areas of interest include staff attachment, research, supervision of postgraduate studies and student exchange programmes.

2. New Dimension Sdn Bhd & Petroclamp Sdn Bhd

This tripartite collaboration will work towards improving Petroclamp corrosion management and asset integrity in the oil and gas industry. New Dimension and Petroclamp will commercialise UTP's Pipeline Reliability and Integrity Assessment software (PRIA) and Mobile In-Situ Corrosion (MiCorr) to prevent corrosion in oil and gas pipelines.

ators



4. Dewan Perniagaan & Perindustrian Melayu Perak (DPPMP)

UTP and DPPMP to co-operate in the field of science, technology and innovation. The areas of collaboration include research activities and educational programmes. This partnership will also further strengthen UTP as a partner of choice in developing the needs of the economy and industry.



5. Swinburne University of Technology, Sarawak

The two universities will work together in student exchange and mobility, research attachment and research projects, among others. They will also work on joint research collaboration projects and activities, especially in the areas of digitalisation and Internet of Things (IoT). Other areas include social responsibilities activities and STEM outreach programmes.

3. Department of Irrigation & Drainage (DID), Malaysia

UTP and DID will share expertise, technology and resources in working towards the sustainable conservation of the environment. Areas of interest will include coastal hydraulics and offshore engineering, internship programmes, joint research and publication, staff development, joint publications and sharing of laboratory facilities.

6. Texas A&M Engineering Experiment Station & Texas A&M University, USA

This 3 way team-up provides a platform for cooperation faculty and student experiences, sharing of research resources and the utilisation of new and improved technology for research. This collaboration will help develop new ideas and build the scientific capacity of UTP especially in the advent of the Fourth Industrial Revolution.



Learning With Robots, One Brick At A Time

UTP is piloting a programme that uses LEGO robots as a complimentary tool for teaching children with autism spectrum disorder.

The robots, made with the LEGO EV3 Mindstrorm, had been specially programmed to teach children with special needs. The robots are the feature of Associate Professor Dr Noreen Izza Arshad's ongoing research. In the last few years, Noreen, who is a senior lecturer at UTP's Positive Computing Research Cluster at the Institute of Autonomous Systems with her team of ten researchers including Dr Ahmad Sobri Hashim and Dr Mazeyanti Ariffin have been delving into the use of robots as a teaching aid for children with special needs, in particular those with autism spectrum disorder (ASD).

Delving deeper into the use of reprogrammable and multifunctional robots yielded encouraging insights into its use for children with special needs – with research pointing to toddlers considering robots as peers rather than toys because of its flexible capacity and features that appear to be more interactive and engaging.

"Robots also appear to be more effective because of the interactive and engaging multisensory design features compared to a software or computer-mediated therapy," she adds.

"There is also research that reveal that a child's interest towards a robot naturally become the reason for their voluntary communication," she says, adding that there is a suggestion that because the features of a robot do not resemble human beings, this indirectly encourages these children to communicate.

She adds that studies have also shown that a robot's appearance is seen as the main focus that attracts autistic children and triggers their curiosity toward the robot. Similarly it is believed that sound, music, vocal messages, colour, visual cues as well as movements that are considered as meaningful actions can aid in persuading a positive attitude.

Noreen's research is funded by the Ministry of Education under the Prototype Research Grant Scheme, which she received in 2015. With the RM110,000 grant, the team studied the current teaching delivery method for the various modules in the syllabus and worked on developing the robotic component.

In the case of teaching pupils to recognise the different coin values for example, the team developed a robot structure that could calculate the circumference of each coin and identify it.

"So when the child puts the coin on the robot, it will read the coin and say the value out loud," she says. In all, the team has developed 10 robots that could deliver various learning modules in fun ways.

The team visited the National Autism Society of Malaysia (NASOM) Ipoh branch and a few autistic children at their homes. Collectively, tests were made among 30 autistic children and the results showed that the robotic intervention enhanced learning environment and could boost the children's understanding by 50%..

"Let's say the teacher is teaching them about colours, with the previously used method, they can only attentively listen for 5 minutes. But with the LEGO EV3 Mindstorm that we have programmed, they can stay focused for 20 minutes and interestingly they started to talk, touch, take turns, volunteer, and seem to enjoy the learning," says Noreen.



Welcome aboard

New staff members joined us during the months of January to March this year. We welcome our new colleagues from both far and near and we wish you a great journey here at UTP.

Firas Outa
Research Scientist
Centre for Intelligent Signal & Imaging Research (HiCoE CISIR)

Rooney Petrus Balandong
Research Scientist
Centre for Intelligent Signal & Imaging Research (HiCoE CISIR)

Ahmad Bukhari Aujih
Research Scientist
Centre for Intelligent Signal & Imaging Research (HiCoE CISIR)

Noor Iffah Mehat
Executive
Centre for Student Development

Nur Atiqah Mat Jani
Executive
Finance

Mohd Irwan Md Yusof
Executive
Centre of Excellence in Teaching & Learning (CETaL)

Associate Professor Dr Hasbullah Ashari
Associate Professor
Management & Humanities

Mohamad Nur Hanafi Ahat
Assistant
Registry

Nurulhuda Azmi
Research Scientist
CO_2 Research Centre
(CO_2RES)

Professor Emeritus Dato' Dr Tengku Mohd Tengku Sembok
Senior Professor
Computer & Information Sciences

Sharifah Yasmin Rafidah Wafa
Syed Farid Nasir Wafa
Executive
Corporate Communications

Congratulations!

To our alumnus on his achievement as the first Malaysian to complete Professional Fellowship at Tennessee General Assembly, USA

Name : **Kuhan Pathmathevan**
Bachelor of Engineering (Hons) Chemical Engineering

Class year : **2005**

Profession : **Senior Deepwater Wells Engineer, PETRONAS & Director in Policy, Planning and Research, Prime Minister Department**



"Undeniably, my position today is a testament to my UTP journey. Its holistic, transformational approach has developed and shaped us into community change-makers".