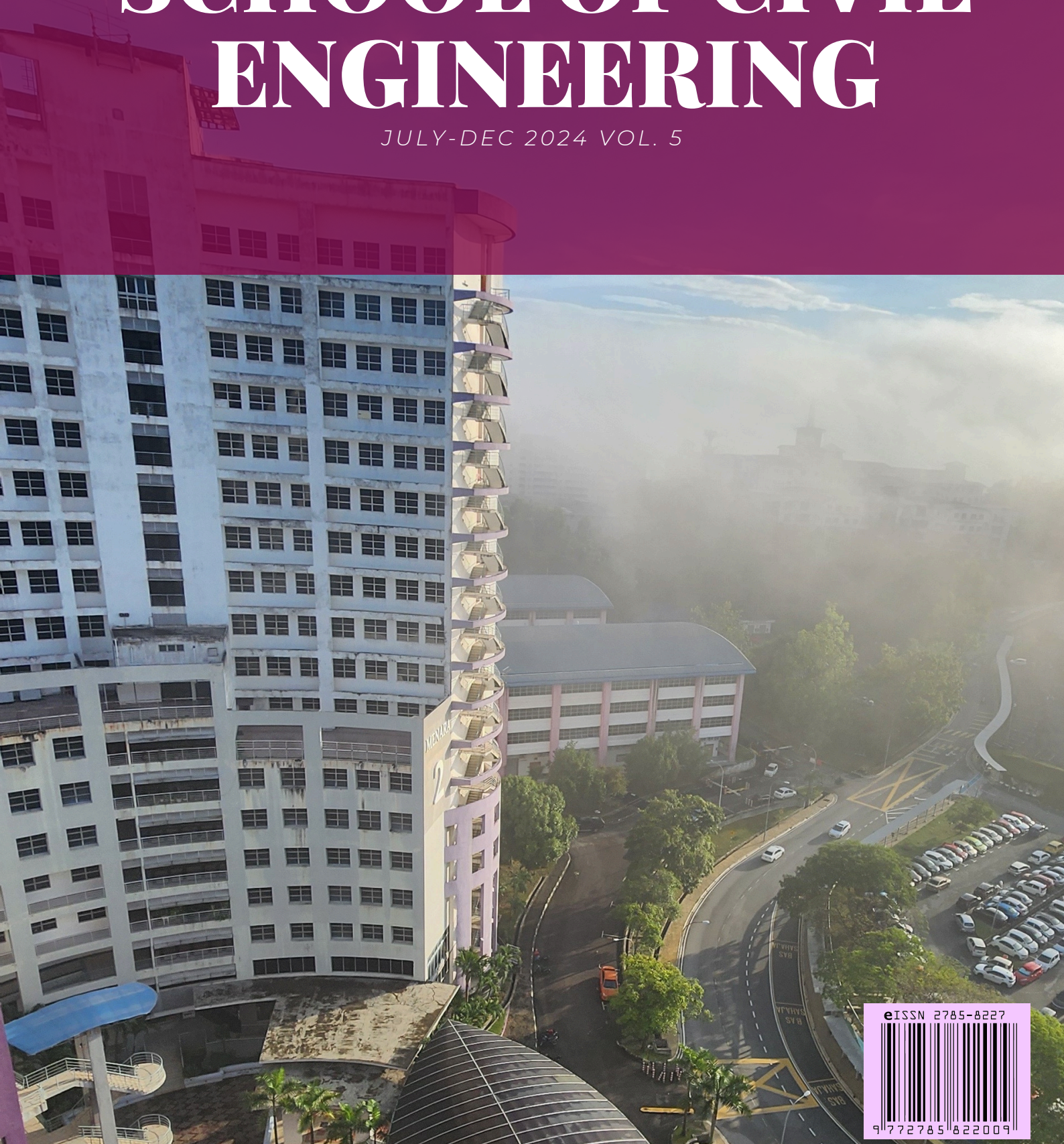
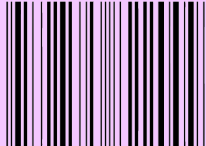


SCHOOL OF CIVIL ENGINEERING

JULY-DEC 2024 VOL. 5



eISSN 2785-8227



9 772785 822009



Meet The Corporate SCE

ADVISOR

PROF. IR. TS. DR. CHE KHAIRIL IZAM
CHE IBRAHIM

CO-ADVISOR

ASSOC. PROF. IR. GS. DR. NORASHIKIN
AHMAD KAMAL

MAIN EDITOR AND CONCEPT

TS. DR. NURSAFARINA AHMAD

CONTENT EDITOR

TS. DR. IRMA NOORAZURAH MOHAMAD

EDITOR

IR. TS. DR. RADEN MAIZATUL AIMI MOHD AZAM
IR. DR. FARIZ ASWAN AHMAD ZAKWAN
TS. DR. NUR ILYA FARHANA MD NOH
TS. DR.-ING. ILYANI AKMAR ABU BAKAR

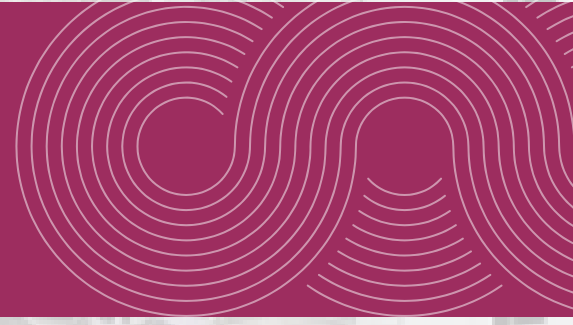
WEBSITE

DR. NURUL AINAIN MOHD SALIM
DR. NURIZATY ZUHAN
DR. NORAIDA MOHD SAIM
MUHAMMAD HAFEEZ OSMAN

SOCIAL MEDIA

TS. DR. YAZMIN SAHOL HAMID
AMIRUDDIN MIRSHAD

TABLE OF CONTENTS



MEET THE CORPORATE SCE	1
SCE DASHBOARD, NEW STAFF AND VISITING PROFESSOR	3
STAFF PROMOTION AND STAFF APPOINTMENT	4
PHD AWARDS	5
PROFESSIONAL QUALIFICATION	5-6
SUSTAINABILITY ANNUAL REPORT 2023	7
ACADEMIC STAFF: NEWS & RESEARCH HIGHLIGHTS	
• Full 6 Years Accreditation Award without Interim	9
• Building Global Bridges: Fulbright Program	9
• 16TH International Conference on Concrete Engineering and Technology (CONCET2024)	10
• Academician High Council Forum Series	11
• Program Kemerdekaan Tahun 2024	12
• 11th QS Reimagine Education Awards & Conference	13
• Remarkable Achievement: 42nd Annual Conference of AFEO	13
• Collaborative Engagement with International University	14
• International Activities	15-19
• Media Appearance: Flood Preparedness in Malaysia	20
• CBPM: Legal Risk Assessment Framework	21
• GEOTREN: Kajian Kesan Lubang Benam/Mendapan	22
• WRES: Nature's Little Helpers	23
• STRUCM: Geopolymer Cement	24
PUBLICATIONS	25
RESEARCH GRANTS	25-29
CONSULTATION	30
STUDENTS: ACADEMIC ACHIEVEMENTS & ACTIVITIES	
• Anugerah Hadiah Buku Inovasi MTDC	32
• Anugerah Pingat Emas Naib Canselor	32
• Student's Achievements	33-34
• Inbound and Outbound Students	35
• CEEC240: Rail Journey Across Klang Valley	36
• SULAM Activities	37-38

SCE

DASHBOARD

*Data updated: Dec 2024

ACADEMIC STAFF

119
36 83

PERMANENT = 116 CONTRACT = 3

PROFESSOR



FULL | ASSOC
5.9% 21.0%

PhD

101
(84.8%)

PROFESSIONAL ENGINEER

45
17 28

STAFF (PENTADBIR AKADEMIK)

22

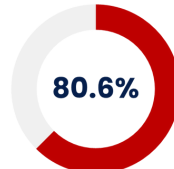
ACADEMIC STAFF (SECONDMENT)

WITHIN UTM | OUTSIDE UTM
14 | 1

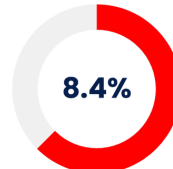
GRED (STAFF)

GRED	STAFF	MALE	FEMALE	%
VK	7	4	3	5.9
DM 53/54	25	9	16	21.0
DM 51/52	85	22	63	71.4
DM 45	2	-	2	1.7

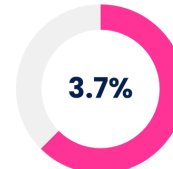
STUDENT ENROLMENT (2060)



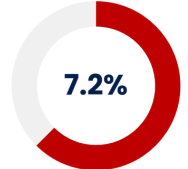
1660



174

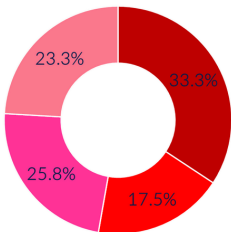


77



149

DIVISION (STAFF)



Division	Male	Female
StrucM	13	27
CBPM	10	11
GeoTRen	9	21
Wres	4	24

Bachelor

Range	Σ	%
56-60	9	8.5%
51-55	8	6.8%
46-50	23	18.8%
41-45	46	39.3%
36-40	23	18.8%
31-35	8	6.8%
26-30	2	0.8%

MSc (Coursework)

STAFF (STUDY)
FULL | PART | VIVA VOCE

1 | 11 | 1

Master (Research)

PROGRAMME

UG | PG
2 | 8

GRADUATE EMPLOYABILITY

93.8%

NEW Staff



SR. DR. NUR ADILLA ZULKIFLI (GEOTREN)



IR. TS. DR. ROSMAWATI MAMAT (GEOTREN)

VISITING



Professor

NOVEMBER 2024 - NOVEMBER 2026



PROF. DR. PATRICK MANU
SCHOOL OF ARCHITECTURE & ENVIRONMENT, UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL, UK

STAFF Promotion



PROF. TS. DR. MOHD
HSIBANY MOHD HASHIM



ASSOC. PROF. DR.
MARFIAH AB WAHID



ASSOC. PROF. DR. MUHD
NORHASRI MUHD SIDEK



ASSOC. PROF. IR. TS. DR.
SAKIAH AB KUDUS

STAFF Appointment



PROF. TS. DR. WARDAH TAHIR
PENGARAH UNIT HAL EHWAL KURIKULUM
PEJABAT TIMBALAN NAIB CANSOLOR
(AKADEMIK & ANTARABANGSA)
&
TIMBALAN PENERUSI
MAJLIS KERJASAMA KETUA-KETUA PUSAT
PENGAJIAN DAN PEMBELAJARAN IPTA
MALAYSIA (MAGNETIC)



PROF. TS. DR. MOHD FADZIL ARSHAD
PENGARAH
INSTITUT KEJURUTERAAN INFRASTRUKTUR &
PEMBANGUNAN MAMPAN (IESMD)



**ASSOC. PROF. IR. TS. DR. NORLIYATI
MOHD AMIN**
PENILAI LUAR PROGRAM TEKNOLOGI
PEMBINAAN KOLEJ VOKASIONAL SUNGAI
BULOH



DR. ZADARIANA JAMIL @ OSMAN
KETUA
KERJASAMA STRATEGIK & PROJEK KHAS,
BITCOM UTM

PHD Awards



DR. NORAIDA MOHD SAIM

PHD IN CIVIL ENGINEERING
UNIVERSITI KEBANGSSAN
MALAYSIA (UKM)



DR. NOR IZZAH ZAINUDDIN

PHD IN CIVIL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
(UITM)

PROFESSIONAL

Qualification

PROFESSIONAL ENGINEER (PE)



**ASSOC. PROF. IR. TS. DR.
ROHANA HASSAN**



**ASSOC. PROF. IR. TS. DR.
NORBAYA HJ SIDEK**



**ASSOC. PROF. IR. DR.
SITI RASHIDAH MOHD NASIR**



**IR. DR. RUQAYYAH
ISMAL**



**ASSOC. PROF. IR. TS. DR.
EKARIZAN SHAFFIE**



**ASSOC. PROF. IR. DR.
SHEILA A/P BELAYUTHAM**

PROFESSIONAL *Qualification*

PROFESSIONAL GEOSPATIALIST (GS)



**ASSOC. PROF. IR. GS. NORASHIKIN
AHMAD KAMAL**

PROFESSIONAL SURVEYOR (SR)



SR. DR. NUR ADILLA ZULKIFLI

ASEAN CHARTERED PROFESSIONAL ENGINEER (ACPE)



**PROF. IR. TS. DR. CHE KHAIRIL IZAM
CHE IBRAHIM**



**ASSOC. PROF. IR. TS. DR.
JEZAN MD DIAH**



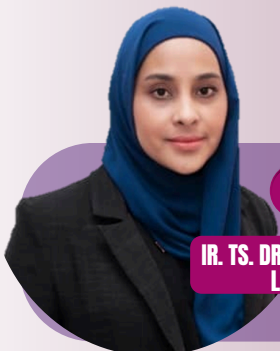
**ASSOC. PROF. IR. TS. DR.
ADNAN DERAHMAN**



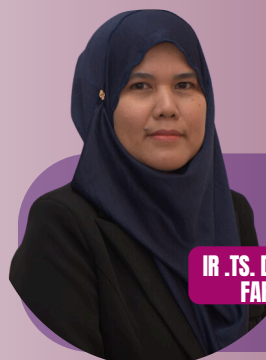
**ASSOC. PROF. IR. TS. DR.
NORLIYATI MOHD AMIN**



**IR. DR. MOHD RIDZUAN
MOHD ALI**



**IR. TS. DR. NURUL FARIHA
LOKMAN**



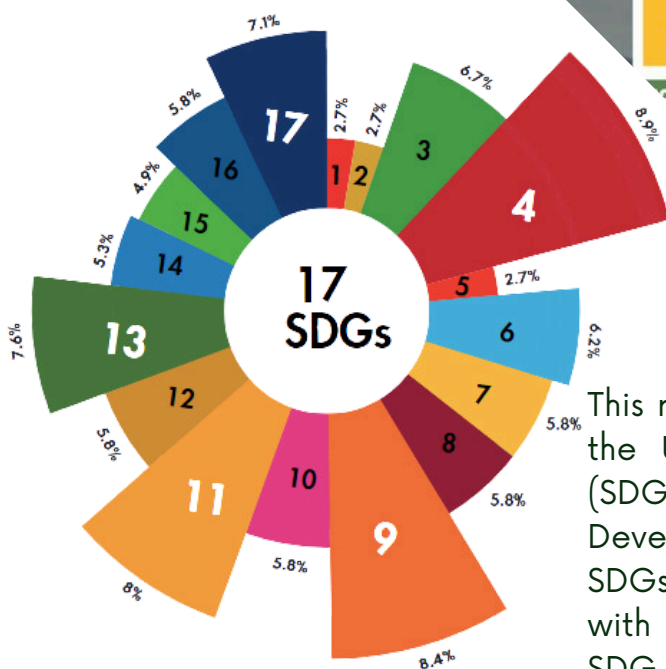
**IR. TS. DR. NURYAZMEEN
FARHAN HARON**



**ASSOC. PROF. IR. TS. DR.
NORBAYA HJ SIDEK**

SCHOOL OF CIVIL ENGINEERING UNIVERSITI TEKNOLOGI MARA

SUSTAINABILITY ANNUAL REPORT

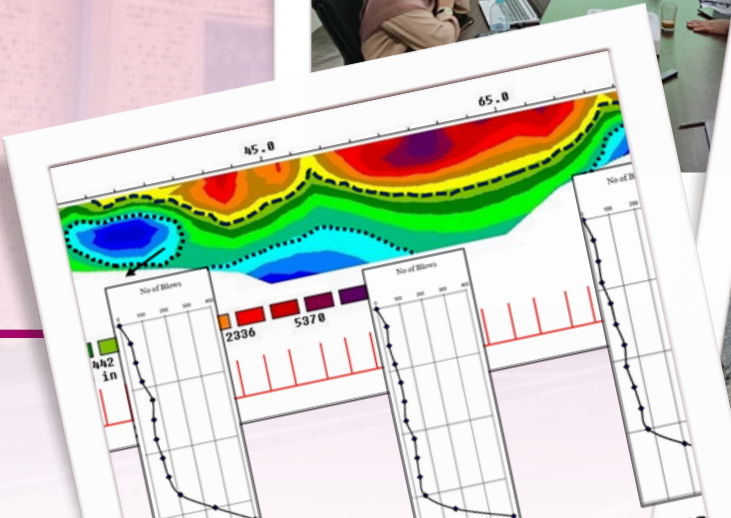
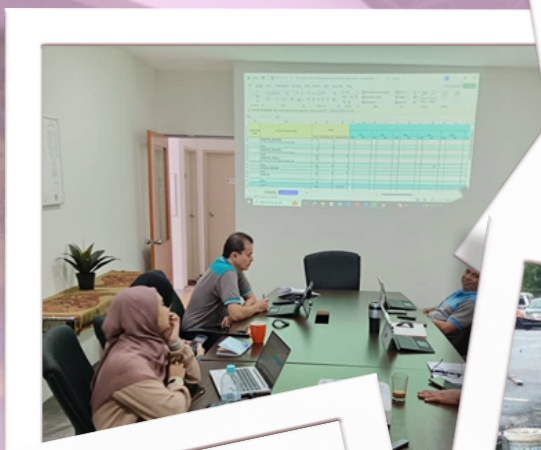
2023


This report underscores our unwavering commitment to the United Nations Sustainable Development Goals (SDGs) and the principles of Education for Sustainable Development (ESD). This report not only identifies the 17 SDGs but also prioritizes five key goals that resonate with our internal strategy: SDG4 (Quality Education), SDG 9 (Industry, Innovation, and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 13 (Climate Action), and SDG 17 (Partnership for the Goals).

Through a dedicated focus on these priority SDGs, we aim to foster a sustainable and inclusive society. Our commitment to ESD at the higher education level ensures that our civil engineering academics and graduates are well-equipped with the knowledge, skills, and values necessary to address complex sustainability challenges, thereby contributing meaningfully to the global sustainable development agenda.

More info : [SUSTAINABILITY ANNUAL REPORT 2023](#)

ACADEMIC STAFF NEWS & RESEARCH HIGHLIGHTS



KOMPLEKS
TUANKU
MU'AZ

FULL 6 YEARS ACCREDITATION AWARD WITHOUT INTERIM



School of Civil Engineering has been awarded a full 6-year accreditation from the Engineering Accreditation Council (EAC), without interim, for:

- **Bachelor of Civil Engineering with Honours (CEEC222) from 2025 to 2030**
- **Bachelor of Engineering (Hons) Civil (CEEC220) from 2025 to 2026**

This remarkable achievement is a testament to the hard work and dedication of our kolej, staff, and students. Kudos to everyone involved!

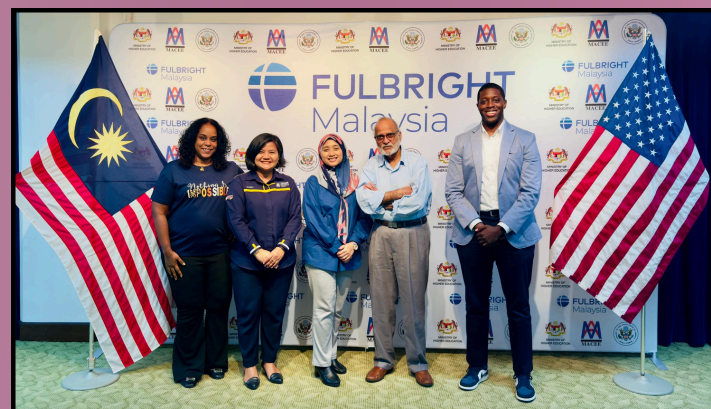
BUILDING GLOBAL BRIDGES: FULLBRIGHT SPECIALIST ENHANCE CIVIL ENGINEERING EDUCATION AT UiTM



The Fulbright Specialist Program, a globally renowned initiative for academic exchanges, brought Prof. Emeritus Dr. M. Shamim Rahman from North Carolina State University to UiTM's School of Civil Engineering from 5th – 14th November 2024. This collaboration aimed to enhance curriculum development, knowledge sharing, and skill-building in modelling and simulation, reflecting UiTM's dedication to academic excellence and global engagement. The program's objectives included incorporating advanced computational tools into the civil engineering curriculum, empowering students and academics with state-of-the-art resources, and fostering long-term research partnerships.

Activities began with discussions between Prof. Rahman and UiTM leadership, followed by a public webinar on "Modelling, Computing, and Simulation for Engineering Problems." A hands-on MATLAB workshop offered practical training, while curriculum development sessions integrated computational methods into UiTM's programs. Prof. Rahman also visited labs and explored collaboration opportunities.

The program enriched UiTM's Civil Engineering curriculum, enhanced research capacity, and developed students' critical thinking and problem-solving skills. It contributed to SDGs 4, 9, and 17. The School of Civil Engineering expressed gratitude to Prof. Shamim and Fulbright, highlighting the foundation laid for future collaborations to advance education and global progress.

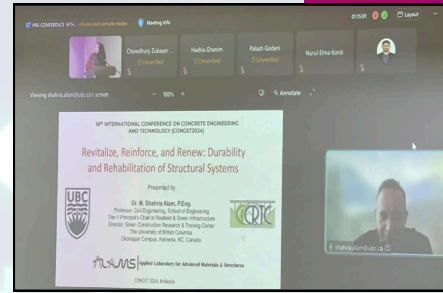


16TH INTERNATIONAL CONFERENCE ON CONCRETE ENGINEERING AND TECHNOLOGY (CONCET 2024)

Pre & Main Conference

CONCET2024 with the theme "Concrete of Tomorrow - Paving the Path to Sustainable Construction" was organized by Universiti Teknologi MARA (UiTM), with support from Universiti Malaya (UM) and The Institution of Engineers, Malaysia (IEM). This year's event was organized by UiTM, with Prof. Ts. Dr. Mohd Hisbany Mohd Hashim delivering the welcome speech, Prof. Ir. Ts. Dr. Che Khairil Izam Che Ibrahim delivering the keynote address, and Prof. Ir. Ts. Dr. Hj. Hamidah Mohd Saman officiating the ceremony.

The CONCET2024 had three major components: a pre-conference, the main conference, and a post-conference site visit. The pre-conference was held online on July 9, 2024, and featured speakers Prof. Dr. Shahria Alam - Professor at the University of British Columbia, Okanagan campus and Ir. Dr. Teh Tzyy Wooi - the Director of H&T Consulting. The pre-conference event was attended by 44 local industry professionals and academicians, 48 students from UiTM, UM, B. S. Abdur Rahman Crescent Institute of Science & Technology in India, Universitas Muhammadiyah Jogjakarta in Indonesia, and Ajloun University in Jordan.



The main conference took place on July 11, 2024, in a hybrid format at the Hotel UiTM Shah Alam and via Webex. It featured three parallel technical sessions with 39 papers presented. Prof. Dr. Shahria Alam (online), Prof. Caijun Shi, and Prof. Dr. Henk M. Jonkers (both in-person) gave keynote addresses. The best paper and presenter awards were announced during the main conference.

The event highlighted cutting-edge developments in concrete engineering while also encouraging collaboration and knowledge exchange among international scholars, industry professionals, and students. The CONCET2024 committee would like to extend its sincere gratitude to the Corporate Sponsor, Zacklim, and the Bronze Sponsor, HAR Builders Enterprise, for their generous and invaluable support.



Post-Conference

EXPLORE THE SKIES WITH AN EXCLUSIVE LOOK AT MENARA MERDEKA 118

The post-conference on July 12, 2024, included a site visit to Menara Merdeka 118. Y.M. Tengku Dato' Ab. Aziz Tengku Mahmud (Ketua Pegawai Eksekutif, PNB Merdeka Ventures Sdn. Berhad) of PNB Merdeka Ventures Sdn. Berhad, providing an insightful overview of the Menara Merdeka 118 project. This presentation highlighted the architectural and engineering innovations that make this tower a landmark of modern construction. The highlight of this post-conference event was an exclusive tour of Menara Merdeka 118, offering participants a unique opportunity to explore one of Malaysia's most iconic architectural and engineering marvels, the second-tallest building in the world.



ACADEMICIAN HIGH COUNCIL FORUM SERIES

Between July and September 2024, the School of Civil Engineering hosted a series of informative Academician High Council Forum sessions. On 26th July, the forum titled "How to Find Your Niche Area?" featured Assoc. Prof. Ir. Ts. Dr. Jazan Md. Diah and Prof. Ir. Dr. Lee Wei Koon, who shared strategies for identifying and developing niche areas in research. On 9th August, the forum "How to be an Effective Supervisor" focused on mentorship, with Assoc. Prof. Ir. Ts. Dr. Mazidah Mukri and Assoc. Prof. Ir. Dr. Siti Rashidah Mohd Nasir discussing the key responsibilities of supervisors. On 23rd August, the forum "Expertise Empowerment Through Industry and International Networking" emphasized the importance of industry and international collaborations, with Assoc. Prof. Ir. Dr. Ismacahyadi Bagus Mohamed Jais and Assoc. Prof. Dr.-Ing Masria Mustafa leading the discussion.

*Knowledge is the treasure of a
wise man.*

On 30th August, Assoc. Prof. Ir. Ts. Dr. Jazuri Abdullah and Assoc. Prof. Ir. Ts. Dr. Rohana Hassan shared insights on selecting the right journal and handling reviewer feedback in the session "Navigating the Path to Publication." Finally, on 27th September, Assoc. Prof. Ir. Dr. Sheila Belayutham and Assoc. Prof. Ts. Dr. Norhafezah Kasmuri discussed overcoming challenges in high-impact journal publication in the forum "Struggles and Tribulations – Tips for Successful High-Impact Journal Publication." These forums provided practical advice, strategies for success, and interactive opportunities to engage with experts in various fields of academia and research.



PROGRAM KEMERDEKAAN TAHUN 2024 PERINGKAT KOLEJ PENGAJIAN KEJURUTERAAN



Program Kemerdekaan Tahun 2024 was held on August 29th, 2024, at the College of Engineering Square. This program was organized by the Welfare Committee of the College of Engineering (KPK) and the Administration Office, aims to celebrate and ignite the spirit of independence among staff.

Staff from the School of Civil Engineering had participated in this program, which was officially launched by Y. Bhg Prof. Ir. Dr. Hajah Hamidah Mohamad Saman at 8:00 AM, marking the beginning of a spirited event.

Throughout the program, various exciting activities were held. Listed are the events won by PKA staff were:

Larian Kemerdekaan Women:

Dr. Nurbaiah Mohamad Noh - 3rd place

Ir. Ts. Dr. Zaizatul Zafflina Mohd Zaki - 4th place

Dr. Nurizatzy Zuhan - 5th place

Ir. Ts. Dr. Nurul Fariha Lokman - 10th place

Larian Kemerdekaan Men:

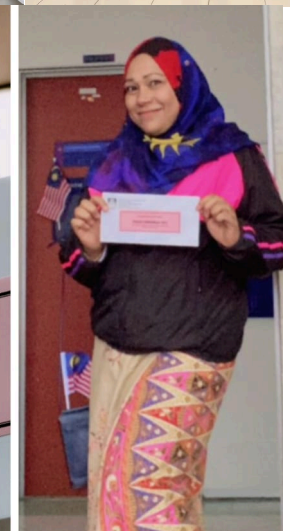
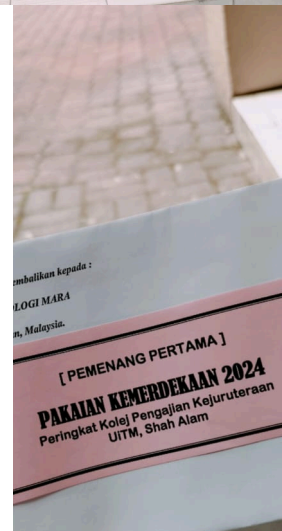
Ir. Dr. Mohd Ridzuan Mohd Ali - 1st Place

En. Abd Razak - 6th place

Assoc. Prof. Ir. Ts. Dr. Adnan Derahman - 8th place

En. Muhammad Faiz Ahmad Zait - 10th place

Special award goes to Ts. Dr. Yazmin Sahol Hamid for 1st place in Independence Outfit. There was also a team that joined the Kayuhan Merdeka led by Cik Zarina and En. Shahfie Md Latep.



SILVER AWARD AT THE PRESTIGIOUS 11TH QS REIMAGINE EDUCATION AWARDS & CONFERENCE 2024, LONDON, UNITED KINGDOM

Universiti Teknologi MARA (UiTM) proudly achieved a milestone at the 11th QS Reimagine Education Awards & Conference (December 9–11, 2024, QEII Centre, London), earning the Silver Award in the prestigious Learning Assessment Category. Represented by Prof. Dr. Ir. Che Maznah Mat Isa from College of Engineering UiTM Pulau Pinang, UiTM's project, Pioneering Resilient Innovative Marketable Engineers for Communities' Sustainability, Diversity, and Inclusivity (PRIME-CSDI), earned the Silver Award in the prestigious Learning Assessment Category.



Integrating Design Thinking and Service-Learning Malaysia University for Society (SULAM) pedagogical approaches into the Engineers in Society course, PRIME-CSDI equips final year civil engineering students to address real-world sustainability challenges through empathy, ideation, prototyping and solution testing. The project led by Ir. Ts. Dr. Nurul Fariha Lokman, Prof. Dr. Ir. Che Maznah Mat Isa, Ts. Dr. Janmaizaturiah Jani, Ir. Dr. Oh Chai Lian, and Ir. Dr. Ruqayyah Ismail, fosters critical thinking and experiential learning while connecting students with communities. Its robust assessment tools ensure comprehensive assessment of the intended learning outcomes. This recognition highlights UiTM's commitment to innovation, sustainability, and excellence, affirming its role as a leader in preparing future-ready and resilient graduates.

REMARKABLE ACHIEVEMENTS AT 42ND ANNUAL CONFERENCE OF AFEO (CAFEO)

Outstanding accomplishments of our Civil Engineering lecturer Ir. Noorfaizah Hamzah (senior lecturer) and Ir. Dr. Siti Hawa Hamzah (former lecturer) of Civil Engineering, Universiti Teknologi MARA (UiTM), who have been recognized for their exceptional contributions to the engineering field at the 42nd Annual Conference of AFEO (CAFEO 42) held in Kota Kinabalu, Sabah.

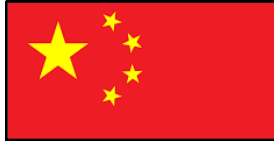
Ir. Noorfaizah Hamzah has been conferred the prestigious title of Honorary Member (Hon. MAFEO) by the ASEAN Federation of Engineering Organisations (AFEO), a recognition of her invaluable contributions to the engineering profession, the Institution, and the nation. While, Ir. Dr. Siti Hawa Hamzah has been awarded the esteemed title of Honorary Fellow of AFEO, further showcasing the excellence of Malaysian engineers on the international stage.



COLLABORATIVE ENGAGEMENT WITH INTERNATIONAL UNIVERSITY



**LEEDS BECKETT
UNIVERSITY**
UNITED KINGDOM (UK)



**SOUTHWEST FORESTRY
UNIVERSITY**
CHINA



ISFAHAN UNIVERSITY
IRAN



UNIVERSITAS ISLAM MALANG
INDONESIA

On 6th November 2024, Dr. Hossein Tajmir Riahi from Isfahan University, Iran, visited the School of Civil Engineering to explore collaboration opportunities. Discussions included staff and student exchanges, joint research, co-supervision of theses, dual/joint degree programs, joint laboratories, and resource sharing. They also explored organizing webinars, conferences, and joint patents, and support for a BSc program in Railway Engineering. The next steps were to identify potential partnerships and research centers.



The SCE warmly welcomed a delegation from Universitas Islam Malang (UNISMA) on 18th November 2024. The delegation visit, led by Assoc. Prof. Dr. Ena Marlina, aimed to strengthen ties and explore collaboration in student exchanges, joint research, and co-publications. The delegation expressed enthusiasm for formalizing a partnership that would mutually benefit both institutions through academic and research endeavors.

On 3rd - 4th December 2024, the School of Civil Engineering hosted Assoc. Prof. Dr. Temitope Omotayo from Leeds Beckett University on "Driving Artificial Intelligence for Construction". Discussions focused on strengthening their MoU and exploring research collaborations, co-teaching, joint grants, and publications. The discussions focused on advancing digitalization in construction and civil engineering. UiTM anticipates future collaborations with Dr. Temitope to enhance digital transformation in research, education, and capacity-building.



On 16th December 2024, UiTM and Southwest Forestry University (SWFU), China, signed a MOU in academic and research collaboration. SWFU delegates visited SCE to discuss opportunities in teaching, joint grants, and student and staff mobility. Key discussions focused on potential collaborations between SCE and SWFU, especially with the College of Civil Engineering, College of Soil and Water Conservation, College of Ecology and Environment, College of Big Data and Intelligent Engineering.

EXPLORING NEW HORIZONS IN FUJIAN: A JOURNEY OF INDUSTRIAL AND ACADEMIC COLLABORATION



From 15 to 19 August 2024, Prof. Dr. Zakiah Ahmad embarked on a memorable trip to Fujian, China, where she witnessed first-hand the remarkable integration of industry and academia. This journey was filled with insightful visits to leading technology companies and institutions, providing a wealth of knowledge and inspiration to take back to Malaysia.

Day 2 Highlights

The day started with a visit to Hengfeng Information Technology Co., Ltd., followed by an engaging technology exchange conference at Fuzhou University. The topics centered on digital empowerment, green energy innovation, and sustainable development. Prof. Dr. Zakiah also had the chance to visit the National New Energy Vehicle Technology Innovation Center and explore the Marine Economic Science and Technology Innovation Highland at Software Park. The day concluded with a signing ceremony for international science and technology cooperation projects at Fuzhou Yuehua Hotel.



Day 3 Highlights

On the third day, the focus shifted to Ningde, where Prof. Dr. Zakiah visited Anfa (Fujian) Biotechnology Co., LTD, a company that started from a small research initiative and grew into a biotechnology powerhouse. The next stop was Contemporary Amperex Technology Co., Limited (CATL), the world's largest manufacturer of EV batteries, providing batteries to Tesla and others. The journey also took her to Tsingshan Industry, which specializes in stainless steel products for various industries. After a busy day, Prof. Dr. Zakiah and her team arrived in Quanzhou by late evening, filled with excitement for the next part of the trip.



The Final Day

The last leg of the journey included a visit to Liming Vocational University, a unique institution offering courses in Civil Engineering, Architecture, Information and Electronic Engineering, and more. The highlight was a tour of the School of New Materials and Shoes & Clothing Engineering, which focuses on innovative shoe sole designs that are lightweight, durable, and ergonomic. A meeting with representatives from five universities in Quanzhou sparked discussions on potential academic collaborations, and Prof. Dr. Zakiah expressed hope that UiTM will establish partnerships in the near future.

The trip served as a powerful reminder of the wisdom behind the saying, "Tuntutlah ilmu sampai ke negeri China." Prof. Dr. Zakiah was particularly impressed by the advancements in technology, research, and industry, which are supported by close ties with universities. She noted, "This was an amazing experience, and I'm grateful for the opportunity. There's so much to learn from the innovation and collaboration here."

Final Reflection

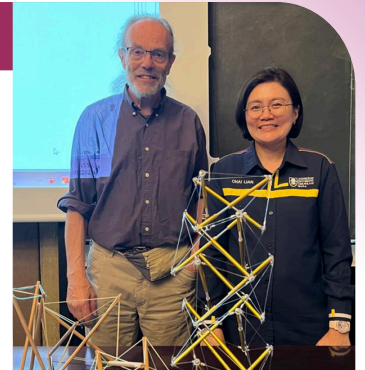
The journey through Fujian was not just an exploration of industries but a valuable learning experience that showcased how academic programs can be tailored to meet industry needs. Prof. Dr. Zakiah concluded that the knowledge gained from this trip will help inform future initiatives at UiTM and inspire new collaborations in Malaysia.

Author: Prof. Dr. Zakiah Ahmad



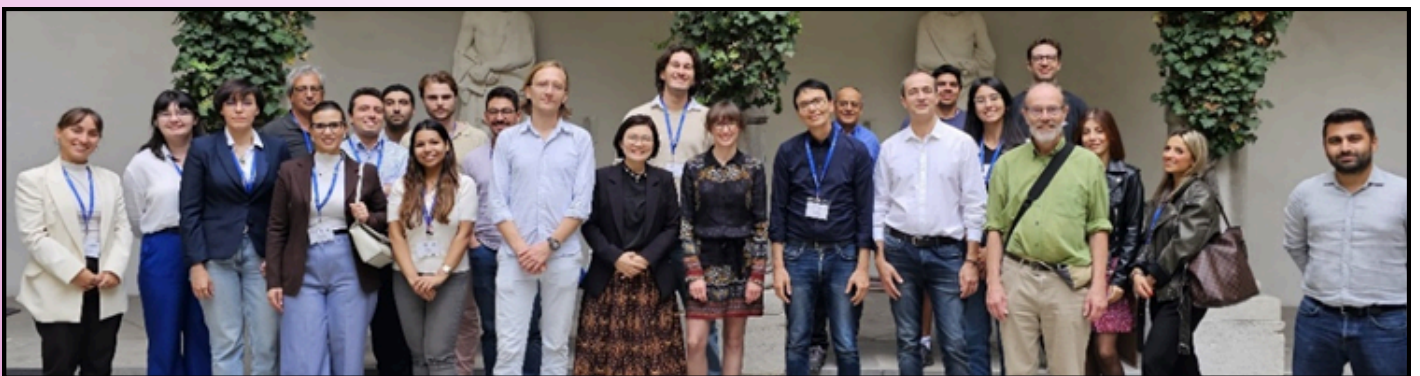
COURSE “TENSEGRITY SYSTEMS: FROM BIOMECHANICS TO MECHANICAL METAMATERIALS”

The course “Tensegrity Systems: From Biomechanics To Mechanical Metamaterials” was organised by International Centre for Mechanical Sciences (CISM), a non-profit organization, founded in 1968 to favour the exchange and application of the most advanced knowledge in the mechanical sciences, in interdisciplinary fields like robotics, biomechanics, environmental engineering and in other fields (mathematics, information and system theory, operations research, computer science, artificial intelligence).



The course was conducted in lecture hall in CISM Palazzo del Torso - Piazza Garibaldi 18 - 33100 Udine, Italy, from 16-20th September 2024. Invited by CISM, the course was delivered by five lecturers: Oh Chai Lian from School of Civil Engineering, College of Engineering, University Teknologi MARA, Shah Alam, Malaysia, Anna Al Sabouni-Zawadzka from Warsaw University of Technology, Warsaw, Poland, Fernando Fraternali from University of Salerno, Fisciano (SA), Italy, Andrea Micheletti from University of Rome “Tor Vergata”, Rome, Italy, Kévin Garanger from University of California, Irvine, CA, USA; and Graham Melvin Scarr from Ezekiel Biomechanics Group, Nottingham, UK. Each of the lecturers has delivered 6 modules of their lecture.

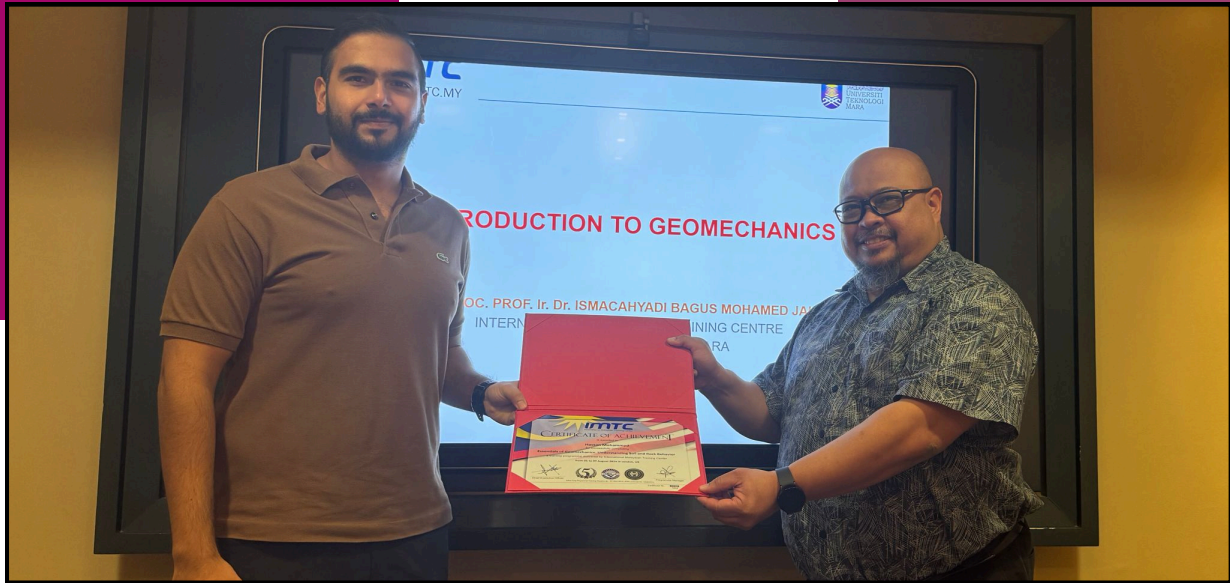
This course is aimed at illustrating the peculiar mechanical behaviour of tensegrity systems in the large displacement regime and their application for the development of mechanical metamaterials, space structures, and mechanical models of biological systems. The course covers thematic blocks of tensegrity and biotensegrity. Highlights are Post-buckling response of tensegrity planetary landers; 3D tensegrity metamaterials; 2D tensegrity and 3D tensegrities with extremal properties, Tensegrity metamaterials; Bandgap response; Wave dynamics of stiffening-type tensegrity metamaterials; Softening-type tensegrity metamaterials; Origami tensegrities; Basic concepts of tensegrity dynamics; Tensegrity space structures; Biotensegrities mimicking the anatomy and physiology of living organisms; Form-finding of linear biotensegrities; Mathematical modelling of the shape change of biotensegrities; Nonlinear biomechanical character of tensegrity: nonlinear biotensegrities, soft matter mechanics in living organisms, the fascia connection (ubiquitous of the fascial connections, kinematic chains), muscles mechanics, biotensegrity dynamics, mechanics of walking and running in a biotensegrity model etc.



There are a total of 36 participants that attended either physically or in an online mode. The participants are from Italy, Poland, Canada, USA, France, The Netherlands and Brazil. The course was conducted interactively between lecturers and participants, with discussion and practical works, in addition to a series of lecture. The students eagerly show their interest in finding configuration of a two-stage Class 1 3-struts tensegrity model, in one of the hands-on activity with Ir. Dr. Oh Chai Lian. She also shared the shape change strategy of biotensegrity model in achieving prescribed targets (see one of the numerical example), which has potential application as deployable tensegrity structures or robotics.

Author: Ir. Ts. Dr. Oh Chai Lian

TRAINING COURSE ON GEOMECHANICS: UNDERSTANDING SOIL AND ROCK BEHAVIOR, SOFITEL LONDON ST JAMES, UNITED KINGDOM.



From 5th to 9th August 2024, Assoc. Prof. Ir. Dr. Ismacahyadi Bagus Mohamed Jais, a lecturer from the School of Civil Engineering, was a speaker/trainer for Essentials of Geomechanics: Understanding Soil and Rock Behavior training course held at Sofitel London St James, United Kingdom.

Organized by the International Malaysian Training Center (IMTC), the workshop provided comprehensive knowledge and practical skills in geomechanics, with a focus on understanding the behavior of soil and rock, slope stability, ground improvement techniques, and mitigation strategies for infrastructure projects.

This training aimed to equip engineers with the expertise needed to address geotechnical challenges in various infrastructure developments. Dr. Ismacahyadi's presentation explored further understanding of geomechanics for infrastructure engineering projects, thus elevate the capacity of the School of Civil Engineering to integrate advanced geomechanical concepts into both research and teaching, aligning with current industry standards and practices.



Author: Assoc. Prof. Ir. Dr. Ismacahyadi Bagus Mohamed Jais



ACADEMIC VISIT STRENGTHENS COLLABORATION BETWEEN UiTM AND UNIVERSITY OF JEMBER

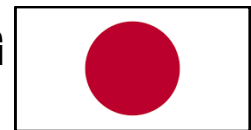
From 28th to 30th October 2024, UiTM and the University of Jember (UNEJ) have been collaborating on academic and research initiatives since 2021 through a Memorandum of Understanding (MOU). This partnership has resulted in successful grant applications and joint research publications. Recently, Prof. Ir. Dr. Lee Wei Koon from UiTM was invited by Prof. Ir. Dr. Entin Hidayah for a three-day academic visit to UNEJ's Faculty of Engineering, fully sponsored by UNEJ, covering both flight and accommodation.



Author: Prof. Ir. Dr. Lee Wei Koon

The visit included discussions on extending the MOU and planning future collaborative activities. Prof. Lee delivered two guest lectures for Coastal Engineering students and an expert lecture for students in Civil Engineering, Environmental Engineering, and Urban Planning. Additionally, UNEJ, UiTM, and Universitas Jenderal Soedirman co-organized a community service project focused on tsunami evacuation planning for the coastal Paseban community. The project included a morning Focus Group Discussion (FGD) and an afternoon site visit in collaboration with the Kencong District Office, Jember Regency. This academic visit underscores the ongoing commitment of both institutions to foster impactful academic and community-centered collaborations.

THE 66TH IATSS FORUM LEADERSHIP TRAINING PROGRAM: EMBRACING LEADERSHIP AND SUSTAINABILITY



From 14th Sept to 12th Nov 2024, Dr. Nor Izzah Zainuddin from School of Civil Engineering, College of Engineering proudly represented Malaysia as one of two Malaysian participants among 21 exceptional individuals selected from 10 countries for the 66th IATSS Forum Leadership Training Program.

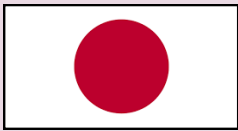
Guided by the motto "Thinking and Learning Together", the IATSS Forum provides a two-months immersive experience in Japan. It offers participants a chance to broaden their perspectives, enhance their leadership capabilities, and collaborate with peers across diverse fields. The program includes four key components: training camp (Gasshuku), Lectures and Workshop, Field Studies and Group Study/Research.

Dr. Izzah described the IATSS Forum as a "once-in-a-lifetime experience" that has profoundly impacted her. The program provided her with a clearer direction for her future plans, deeper self-understanding, and unforgettable experiences staying in Japan. It also offered her a unique platform to make international connections and broaden her horizons.

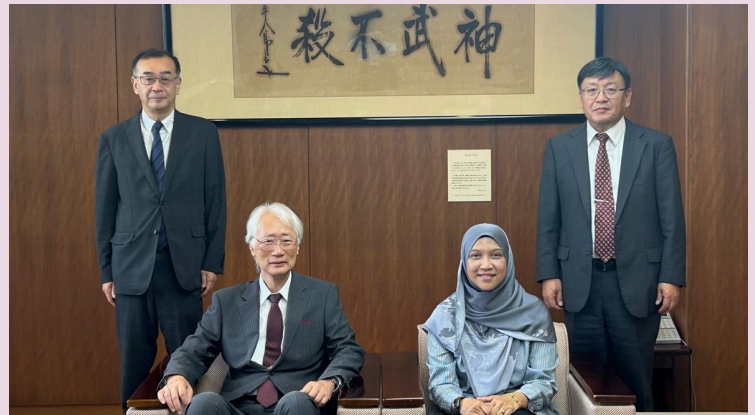
Through this enriching experience, Dr. Izzah is inspired to contribute to sustainable development and leadership excellence in Malaysia and the broader Asian region. Her journey underscores the IATSS Forum's mission to prepare her as young professionals to envision and enact a better future for her home country. Join us in celebrating Dr. Nor Izzah Zainuddin's remarkable achievement and the profound impact of the IATSS Forum! For more updates on applications and ongoing activities, follow the IATSS Forum on Facebook at facebook.com/IATSSFORUM.



Author: Dr. Nor Izzah Zainuddin



ENHANCING STUDENTS COGNITIVE AND SOFT SKILLS THROUGH THE ONLINE EXCHANGE INTERNATIONALISATION PROGRAMME IN COLLABORATION BETWEEN UiTM AND THE UNIVERSITY OF TOYAMA, JAPAN.



School of Civil Engineering, UiTM and the Faculty of Education, University of Toyama, Japan, have started this initiative since 2021. The emergence of COVID-19 is the reason for the start of online international exchange programs between several schools in Malaysia and Japan. This international exchange program is implemented with the theme of Sustainable Development Goals (SDGs). Using SDG-based education, also known as Education for Sustainable Development Goals (ESD), provides opportunities for students to interact by finding solutions. Both parties were collaborated as mentors and facilitators who helped apply the elements of the SDGs in education and were introduced to seven (7) selected and interested elementary schools.

The method used is inquiry-based learning (IBL) and uses scientific data to make decisions. IBL learning is a student-centered approach. The learning process is through research, exploration, and discovery. In this process, students will be actively involved in finding answers and understanding concepts, asking questions, observing, gathering information, and drawing conclusions based on their safeguarding and investigation. At the initial meeting, the school will set a topic to share together. With the selected topic, students will complete the process of gathering information and making a presentation to share with their respective collaborators. Lecturers from both universities will facilitate both parties. Surveys and interviews were conducted to collect data and information on the effectiveness and benefits of the programs. This data and information are also used as a cornerstone to improve weaknesses and shortcomings.

As a result, Students gained confidence in English, cultural awareness, and a global perspective on environmental challenges, along with the excitement of worldwide communication. Teachers benefited from learning new methods and fostering collaboration, encouraging SDG-based activities in Malaysian schools. Due to its success, the program will continue indefinitely.

The collaboration between UiTM and the University of Toyama is further strengthened by helping secondary schools integrate teaching and learning methods with ICT for collaborative learning to support the collection of data science. ICT as a learning aid was used to interact between a Malaysian and Japanese secondary school. The data collected in the study measured the effectiveness of communication between the Japanese and Malaysian student in their small groups. In addition, information related to the topics was shared and the methods of delivering information during the sharing session were also used as reference materials.

The online cross-cultural initiative between Malaysian and Japanese schools has fostered cross-border social interaction that has proven beneficial for both the teachers and students participating. Teachers can expand their understanding of the SDGs with great assistance from the university's expertise and knowledge transfer to the school community.

Author: Assoc. Prof. Dr. Marfiah Ab. Wahid

Media Appearance

FLOOD PREPAREDNESS IN MALAYSIA: UNDERSTANDING THE CHALLENGES AND SOLUTIONS

Floods are one of the most frequent natural disasters affecting Malaysia, occurring nearly every year, particularly during the monsoon season. With a tropical climate characterized by humid weather, Malaysia experiences average daily temperatures ranging from 21°C to 32°C. Its annual rainfall, which constitutes about 80% of the year's weather, ranges between 2000mm and 2500mm. This high rainfall is largely influenced by two monsoon seasons:

- The Southwest Monsoon (May to September), driven by winds from the Indian Ocean.
- The Northeast Monsoon (November to March), influenced by winds from the South China Sea.

During the Northeast Monsoon, the intensity of rainfall typically escalates, triggering widespread flooding, particularly in low-lying areas and coastal regions. These floods not only disrupt daily life but also cause significant socio-economic losses and pose safety risks.



As floods become a regular occurrence, the importance of effective flood preparedness and management cannot be overstated. This includes strategies such as public education, infrastructure resilience, and collaboration between government agencies, academia, and industry experts.

In recent months, various platforms have been utilized to discuss and propose solutions to the challenges posed by floods in Malaysia. Among these initiatives, three experts from the School of Civil Engineering, College of Engineering, UiTM were invited to share their insights and propose actionable solutions to address the ongoing flood challenges in the country.

Preparedness During the Northeast Monsoon

Ir. Dr. Suzana Ramli recently addressed flood preparedness during the Northeast Monsoon in her presentation titled "Monsun Timur Laut: Persediaan Menghadapi Banjir." She emphasized the importance of proactive measures to mitigate risks and protect vulnerable communities.

More info: [Persediaan menghadapi banjir](#)

Safety Measures for Electricity and Gas

In her talk, "Banjir: Utamakan Keselamatan Libatkan Elektrik, Gas," Ts Dr. Mazlina Zaira Mohammad highlighted the critical need to prioritize safety during floods, particularly concerning electrical systems and gas infrastructure. Her insights underscored the risks these utilities pose if not properly managed during emergencies.

More info: [Banjir: Utamakan Keselamatan Libatkan elektrik, gas](#)

Expert Collaboration to Address Flood Challenges

A forum titled "Floods: Causes, Consequences, and a Path Forward?" featured Shah Fiesal Hussain (MERCY Malaysia), Prof. Ir. Dr. Lee Wei Koon (UiTM), and Dr. Nor Eliza Alias (UTM). These three experts discussed and proposed practical and sustainable solutions to the challenges posed by the current floods in Malaysia. Their insights ranged from identifying the root causes of flooding to addressing its long-term consequences through innovative mitigation strategies.

More info: [causes, consequences and a path forward](#)

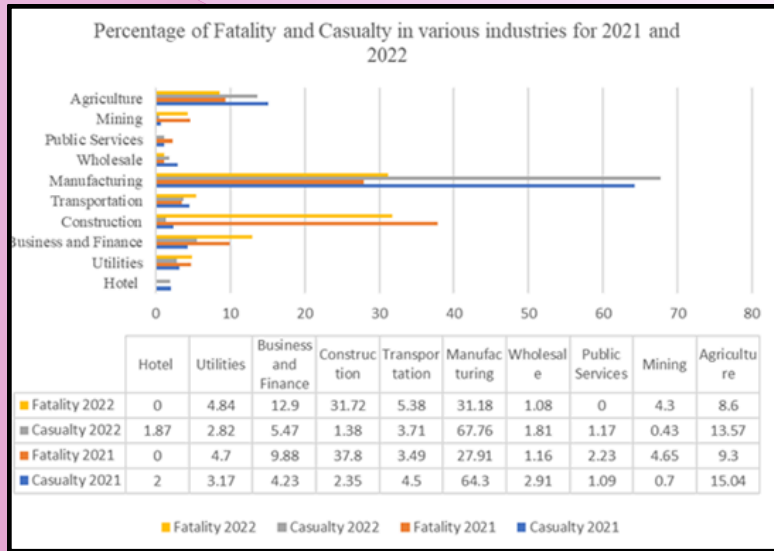


LEGAL RISK ASSESSMENT FRAMEWORK FOR PREVENTION THROUGH DESIGN OVER HIGH-RISE RESIDENTIAL BUILDING LIFE CYCLE IN MALAYSIA



A dedicated team of researchers, including Ts. Dr. Mazlina Zaira Mohammad, Dr. Nor Syamimi Samsudin, Assoc. Prof. Sr. Dr. Natasha Khalil, and Mashitah Binti Mohamad Hanafiah, is investigating ways to improve construction safety in Malaysia by emphasizing the concept of "Prevention through Design" (PtD). Occupational accidents in the construction industry are a significant concern, impacting worker safety, industry stakeholders, and the national economy. Malaysia's construction industry, which relies heavily on foreign laborers who often receive minimal training, ranks third in occupational accidents after manufacturing and services, according to the Department of Occupational Safety and Health (DOSH).

Much research has long established that the upstream phases or design and planning phases have inseparable relation with downstream phases or construction phases. Traditionally, the responsibility to ensure safety and health at the construction site is on the contractor, it is important to note that half of the issues that arise are due to inadequate design. Thus, collective efforts to control hazards should be practiced at all stages of construction which resulted to the new risk management theory, prevention through design. Other than Singapore, United Kingdom, New Zealand and Australia, PtD concept is practice on volunteer basis mainly due to the absent of mandatory legislation and regulation instrument to ensure its application during planning stage by the designers like architect or engineer.



Construction (Design and Management) Regulations 2015 in the United Kingdom, Work, Health and Safety Act 2011 in Australia, Health and Safety at Work Act 2015 New Zealand and Workplace Safety and Health (Design for Safety) Regulation 2015 for Singapore mandated designers to consider safety of workers during maintenance and operation and not only in construction. In Malaysia, Occupational Safety and Health in Construction (Management) (OSHCI(M)) was introduced as volunteer guideline to encourage designers and other construction key player to consider safety as part of the design process in 2017. A positive addition in effort to ensure safety consideration during design, Department of Occupational Safety and Health Malaysia (DOSH) has introduced Occupational Safety and Health (Construction Work) (Design and Management) Regulation 2024 in the latest amendment of Occupational Safety and Health 1994 (Amendment 2022) which is compulsory to comply.

To achieve the objective of this research, 15 experts from building and construction key players are involved to comply with the objectives set. The experts were determined based on their years of technical experience in the industry and familiar with the safety legal framework in Malaysia via online conference or face to face depending on the expert's availability or preference Through Fundamental Research Grant Scheme (FRGS) under the Ministry of Higher Education Malaysia (MOHE), in-depth study of the issue may offer some important opportunity to fill the need for legal risk management framework to facilitate designers to consider safety during design process for high rise building in Malaysia. By providing the room to improve understanding of safety related legal framework among construction industry key player especially designers, the quality and application of safety for the whole life cycle of a building is improved.

Author: Ts. Dr. Mazlina Zaira Mohammad



KAJIAN KESAN LUBANG BENAM/PEMENDAPAN DENGAN MENGGUNAKAN KAEDAH GEOTEKNIKAL DAN GEOFIZIKAL DI SEBAHAGIAN JALAN PSK 2, PSK 4 DAN PSK 7 PUSAT PERDAGANGAN SERI KEMBANGAN, SELANGOR DARUL EHSAN.

Led by Associate Professor Ir. Ts. Dr. Adnan Derahman, a specialized team from the Geotechnical Forensic Specialized Initiative Group (GeoForenSIG) at the School of Civil Engineering, College of Engineering, UiTM, was engaged by JM BUDI RESOURCES to investigate settlement and sinkhole issues at an industrial park in Seri Kembangan. This expert team included Associate Professor Ir. Dr. Ismacahyadi Bagus Mohamed Jais, Ir. Ts. Dr. Abdul Samad Abdul Rahman, Ir. Noorfaizah Hamzah, Dr. Norazlan Khalid, Nur'ain Mat Yusof, Norazuan Imam Mahadi, Mohd Zarinnizar Afif Wahab, Muhamad Hazli Shariei, and Mohd Shahmir Mohd Said. Their work aimed to identify the root causes of the settlement and sinkhole, providing critical insights to support subsequent drain rehabilitation efforts.

The scope of this investigation encompassed a detailed geotechnical forensic analysis, utilizing both geotechnical (MP/JKR probe) and geophysical techniques, such as Electrical Resistivity Imaging (ERI), to accurately assess subsurface conditions. These advanced techniques enabled the team to construct a comprehensive understanding of the underlying causes of the sinkhole formation, offering a scientific foundation for remedial action. This investigation exemplifies the School of Civil Engineering's commitment to applying technical expertise to address critical infrastructure challenges and ensure public safety.

BACKGROUND OF THE PROBLEM

The commercial centre at Seri Kembangan has been reported to experience settlement near Jalan PSK 2, Jalan PSK 4 and Jalan PSK 7 as shown in Figure 1. The road and building experience settlement and voiding, causing dislocation and cracks of the drainage and culvert below the road. The contractor was requested by the Local Authority to repair the drains as there are dislocation and misalignment due to sinkholes developed underneath the buildings and roads, then appointed UiTM to undertake the geotechnical and geophysical investigation works.



Figure 1 Settlement under the building

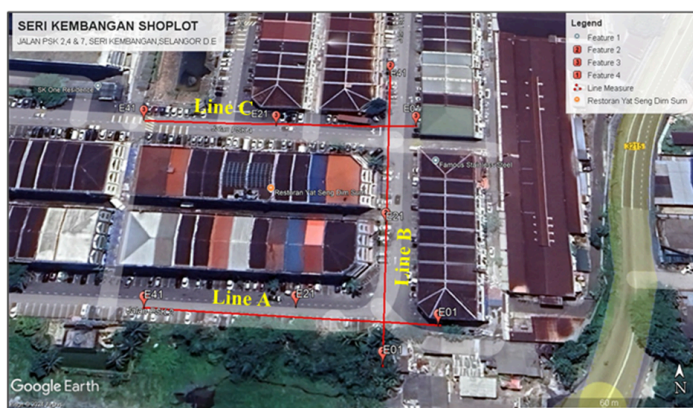


Figure 2 Settlement of the drain



Figure 3 Site location for ERI Line A, B and C with remarks

GEOFRENSIC INVESTIGATION, METHOD OF ANALYSIS AND RESULTS

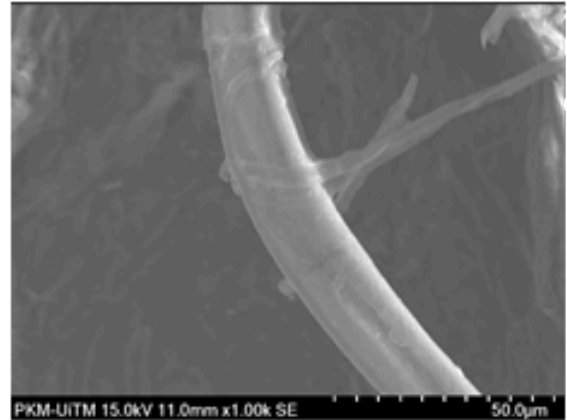
Electrical Resistivity Imaging (ERI) and MP/JKR Probe was used to evaluate the ground settlement in local scale at Jalan PSK 2, PSK 4 dan PSK 7, Pusat Perdagangan Seri Kembangan, Selangor Darul Ehsan. ERI and MP/JKR Probe results were used to interpret the condition of the problematic subsurface profile due to its differential stiffness. There are 3 lines of resistivity were used namely Line 1 for Jalan PSK 2, Line 2 for Jalan PSK 7 and Line 3 for Jalan PSK 4 and each line consists of 5 points of JKR Probe with a total of fifth teen (15) points of MP/JKR Probe carried out at the proposed site shown in Figure 3 to Figure 5, respectively. The site investigation works were carried out in accordance with the JKR specifications and guidelines.

Author: Assoc. Prof. Ir. Ts. Dr. Adnan Derahman

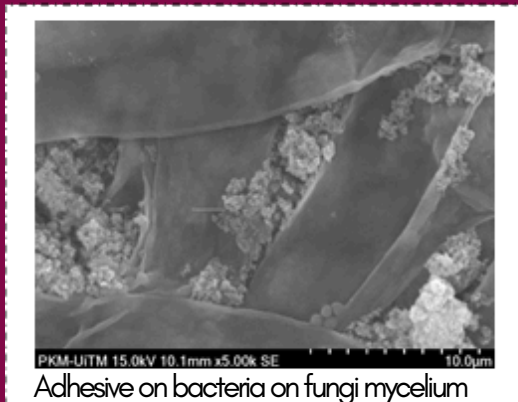


NATURE'S LITTLE HELPERS: MICROBES LEADING THE WAY TO A WASTE-FREE, SUSTAINABLE FUTURE

Microbes, often unseen and underestimated, are at the heart of transforming waste into valuable resources that could shape a more sustainable world. As global waste production and pollution levels continue to rise, finding innovative, sustainable solutions for waste management is more critical than ever. This research explores the unique capabilities of microorganisms in converting organic waste into eco-friendly products, addressing both environmental pollution and resource scarcity. By harnessing microbial power, the BioSS Bricks, ActivZest, and efficient organic pollutant removal methods for wastewater are developed—innovative solutions that transform waste into valuable resources.



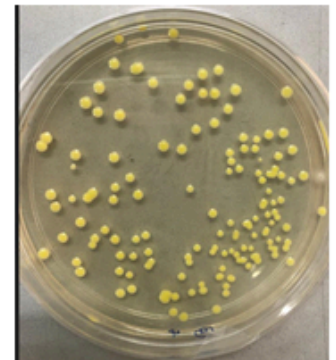
Fugus Hyphae



Adhesive on bacteria on fungi mycelium



Fugus on sludge



Bacteria colony on agar

In the case of BioSS Bricks, the treated sewage sludge by bacteria and fungi can be transformed into durable, interlocking bricks with compressive strength exceeding 15 MPa using stabilization/solidification method. This innovation not only reduces the environmental impact of sewage sludge but also provides an affordable, sustainable alternative to traditional construction materials that comply to USEPA part 503 rules. ActivZest, a bio-product derived from fermented citrus waste and beneficial microorganisms, accelerates plant growth and improves soil health, making it a potent, eco-friendly alternative to chemical fertilizers. It also enhances the composting process, allowing the compost to mature in just two months, significantly reducing the typical time required for decomposition. Lastly, the research is on organic pollutant removal from wastewater leverages microbial synergies (Bacteria-Fungi Interactions) to efficiently degrade pollutants, offering a cleaner, greener approach to industrial wastewater treatment.

These findings contribute to the growing body of knowledge on microbial waste valorization, showing that microbes can play a vital role in environmental sustainability. The results of my research support several Sustainable Development Goals (SDGs), particularly SDG 6 (Clean Water and Sanitation), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 12 (Responsible Consumption and Production). This research helps address pressing environmental issues, such as waste disposal and water contamination, while promoting a circular economy. These microbial innovations offer scalable solutions for cleaner industries, more sustainable agriculture, and better urban infrastructure, contributing to the global effort to build a greener, more resilient future.

Author: Ts. Nurhidayah Hamzah



GEOPOLYMER CEMENT: THE FUTURE OF CONSTRUCTION MATERIALS



Queensland's University GCI building with 3 suspended floors made from structural geopolymer concrete (Hassel Architect, 2013)



Portland cement (PC) has an annual global production exceeding 4,000 million tonnes, a staggering 25-fold increase compared to its production in 2000. In response to this growing reliance on PC, a research team led by Ts. Dr. Warid Wazien Ahmad Zailani is pioneering the development of geopolymer cement as a sustainable alternative to traditional cement. This innovative research focuses on creating cement-free "green concrete" to reduce CO₂ emissions, which currently account for approximately 5–8% of total global CO₂ emissions. Of these emissions, 50–60% originate from the calcination of limestone during PC production, with the remainder from burning fossil fuels.

Geopolymer technology also addresses the issue of excessive industrial by-products such as fly ash and slag, which are often dumped in landfills across Malaysia. By combining fly ash, slag, and specific chemical precursors, a strong and highly durable binder can be produced. This binder achieves impressive strength of over 50 MPa within just one to three days, significantly faster than the 28 days required for Portland cement.

Countries like Australia and China have already embraced geopolymer materials as a large-scale alternative in the construction industry. The University of Queensland in Australia, for instance, has constructed its own building entirely with geopolymer concrete and houses several large-scale geopolymer material companies. This research exemplifies the potential of geopolymer technology as a sustainable and innovative solution for the future of construction materials, offering environmental benefits while maintaining exceptional performance.

Geopolymer has been recognized as one of the advanced materials included in the National Advanced Materials Technology Roadmap 2021–2030 by MOSTI. To establish geopolymer as an alternative binder material in Malaysia's construction industry, the geopolymer research group from the School of Civil Engineering, UiTM, has secured various research grants, including FRGS, IMAP, and international grants from Indonesia and Canada.

Additionally, this innovative product has gained recognition and accolades at both national and international innovation competitions. The successful development of green geopolymer cement is a testament to the collaboration and dedication of the entire team of researchers and students involved. This achievement underscores the potential of geopolymer technology to contribute significantly to sustainable construction practices while promoting Malaysia's advancement in construction.

Collaborative activities and MOUs at both national and international levels have been initiated to promote geopolymer research. Planned initiatives include geopolymer conferences, webinars, and workshops, as well as knowledge-sharing sessions, impactful publications, and book projects.

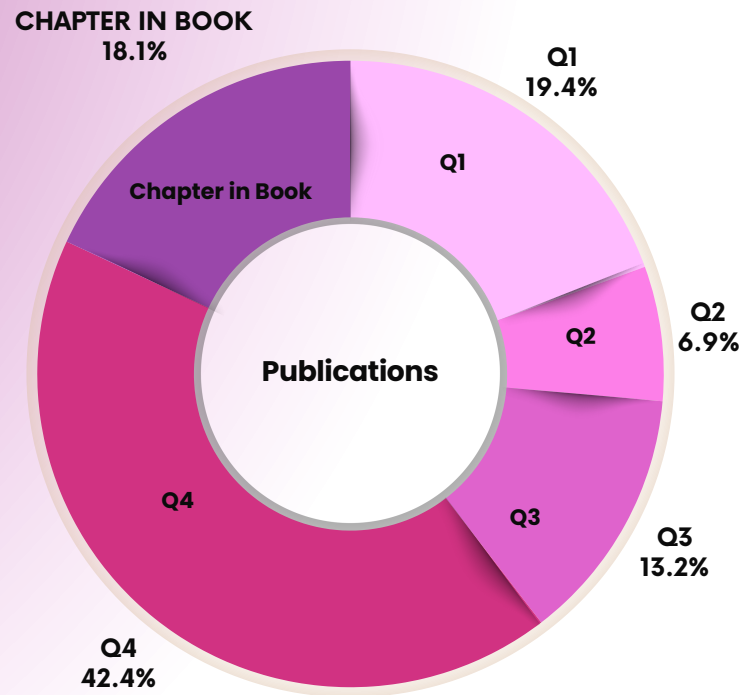
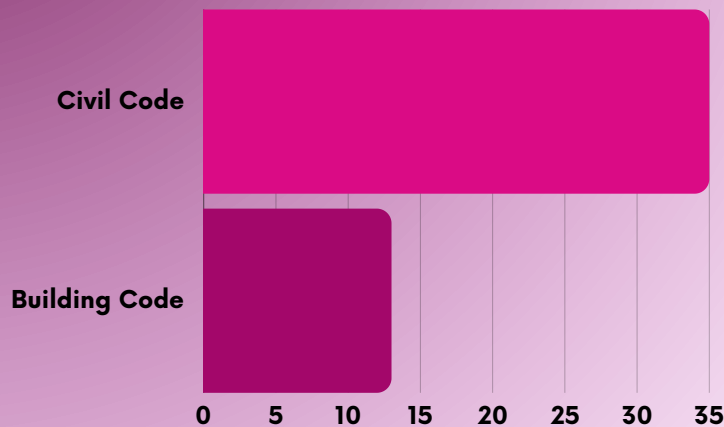
In conclusion, researchers must take a proactive approach to promoting their work and fostering collaborations to enhance visibility and advance their research further. These efforts will contribute to the development of research and technology and its widespread adoption in the construction industry.

Author: Ts. Dr. Warid Wazien Ahmad Zailani



PUBLICATIONS

*Data updated : Dec 2024

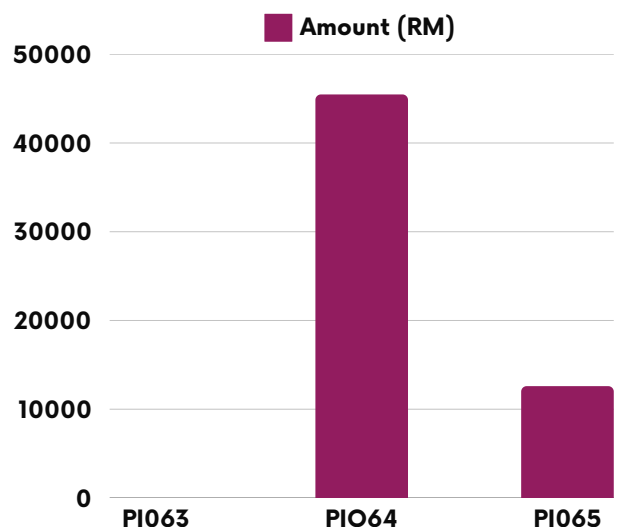
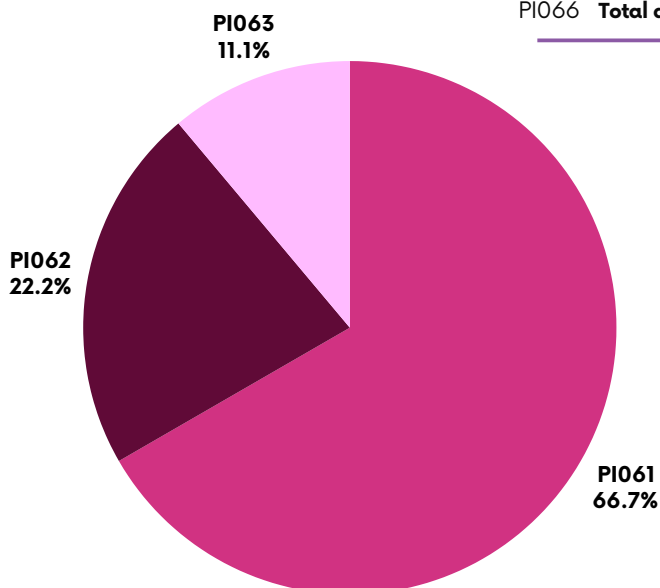


Research GRANT

*Data updated until September 2024 (Source from: Research & Industrial Linkages (PJI), College of Civil Engineering, UiTM Shah Alam)

CLASSIFICATION OF PRINCIPAL INVESTIGATORS (PI)

- PI061 **Number of principal investigators (PI) for research grants: National fund**
- PI062 **Number of principal investigators (PI) for research grants: Industrial fund**
- PI063 **Number of principal investigators (PI) for research grants: International fund**
- PI064 **Total amount of research grants: National fund**
- PI065 **Total amount of research grants: Industrial fund**
- PI066 **Total amount of research grants: International fund**



FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS)



DR. BALQIS MD YUNUS

PHYSIOCHEMICAL AND ENGINEERING CHARACTERIZATION OF A NOVEL ECO-FRIENDLY COATING WITH POLYMER-INFUSED EXPIRED ANTIBIOTICS

AMOUNT: RM 128,400



IR. TS. DR. FARIZ ASWAN AHMAD ZAKWAN

ARTICULATING THE ENHANCEMENT OF SEISMIC LOAD-MOMENT INTERACTION CAPACITY IN RC COLUMNS USING SMA STRIPS UNDER CONCENTRIC AND ECCENTRIC LOADS

AMOUNT: RM 106,200.00



DR. NADIAH SAARI @ ASH'ARI

EFFECTS OF CONSTRUCTIONAL TOLERANCES AND STIFFNESS PROPERTIES ON CONNECTION BEHAVIOUR OF BOLTED INTER-MODULE COLUMN CONNECTION FOR MODULAR STEEL BUILDING

AMOUNT: RM 88,200.00



ASSOC. PROF. IR. TS. DR. MOHD KHAIRUL KAMARUDIN

MODIFIED WEIBULL DISTRIBUTION PARAMETRIC VARIANT IN TROPICAL BAMBOO UNDER ORTHOGONAL STRESS

AMOUNT: RM 91,200.00



IR. DR. RUQAYYAH ISMAIL

PROJECT TITLE: ANALYTICAL PREDICTION MODEL FOR MOMENT-CURVATURE RELATIONSHIP OF CORRODED REINFORCED CONCRETE (RC) BEAMS STRENGTHENED WITH SMART HYBRID STRIPS MATERIAL

AMOUNT: RM 89,500.00



TS. DR. WARID WAZIEN AHMAD ZAILANI

AN INTEGRAL HYDROPHOBIC ADMIXTURE FORMULATION FOR THE WATERPROOFING MECHANISM OF GEOPOLYMER IN AN AGGRESSIVE ENVIRONMENT

AMOUNT: RM 86,200.00



DANA DALAMAN FAKULTI (DDF)

IR. TS. DR. NURYAZMEEN FARHAN HARON

EFFECT OF CARBON FIBRE WRAP ON PROPERTIES OF GRANITE DUST CONCRETE

AMOUNT: RM 15,000.00

GERAN INSENTIF PENYELIAAN (GIP)

ASSOC. PROF. IR. DR. SHEILA A/P BELAYUTHAM

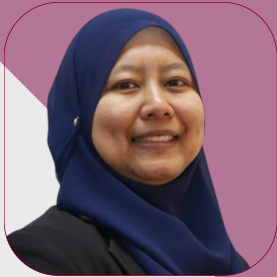
DEVELOPMENT OF A SOCIAL SUSTAINABILITY EVALUATION TOOL FOR THE LIFE CYCLE OF URBAN RAILWAY (RAILSET) DEVELOPMENT

AMOUNT: RM 24,000.00



National RESEARCH GRANTS

FUNDAMENTAL RESEARCH GRANT SCHEME - EARLY CAREER (FRGS-EC)



DR. NURUL AINAIN MOHD SALIM

MECHANISM OF GEOPOLYMERIC SLOPE SURFACE PROTECTION AND EROSION CONTROL

AMOUNT: RM 30,000.00



DR. NUR IZZATI AB RANI

A FUNDAMENTAL INVESTIGATION INTO CONSTRUCTION WASTE MANAGEMENT USING BEHAVIORAL PLANNING THEORIES IN MALAYSIAN CONSTRUCTION INDUSTRY

AMOUNT: RM 30,000.00



DR. NAZIRAH AB. WAHAB

INTERLOCKING BONDING CAPACITY THEORY AT TONGUE AND GROOVE OF LIGHTWEIGHT BIAXIAL INTERLOCKING BLOCKS

AMOUNT: RM 30,000.00



TS. DR. MUSMULIADI KAMARUDIN

ISLAMIC LEADERSHIP FRAMEWORK (ILF) FOR CONSTRUCTION PROJECT MANAGEMENT IN MALAYSIA

AMOUNT: RM 30,000.00



DR. NURIZATY ZUHAN

THE MECHANISM OF PRE-TENSIONED CONFINEMENT IN ENHANCING THE BEHAVIOUR OF REINFORCED HIGH-STRENGTH CONCRETE COLUMNS

AMOUNT: RM 30,000.00



DR. NURUL NORAZIEMAH MOHD PAUZI

DECISION-MAKING FRAMEWORK IN OUTSOURCING BUILDING INFORMATION MODELLING FOR MALAYSIAN CONTRACTORS

AMOUNT: RM 30,000.00



TS. DR. NURUL RABITAH DAUD

BIO-INSPIRED BREAKWATER DESIGNS FOR ENHANCED WAVE DISSIPATION

AMOUNT: RM 29,243.00



IR. TS. DR. RADEN MAIZATUL AIMI MOHD AZAM

MECHANICAL AND MICROSTRUCTURAL EXAMINATION OF CONCRETE SUBSTRATES POST HEAT-ACTIVATED SHAPE MEMORY ALLOY

AMOUNT: RM 30,000.00

National RESEARCH GRANTS

INDUSTRY MATCHING PROGRAMME (IMAP)



PROF. TS. DR. MOHD FADZIL ARSHAD

DEVELOPMENT OF GREEN GEOPOLYMER PAVER BLOCK (GeGPaB) UTILIZING INDUSTRIAL WASTE FOR CONSTRUCTION INDUSTRIES

AMOUNT: RM 164,000.00



ASSOC. PROF. IR. TS. DR. SAKHIAH ABDUL KUDUS

DEVELOPMENT OF REAL-TIME VIBRATION-BASED BRIDGE HEALTH MONITORING SYSTEM

AMOUNT: RM 179,900.00



TS. DR. WARID WAZIEN AHMAD ZAILANI

DEVELOPMENT OF ADVANCED GEOPOLYMER REPAIR MATERIALS (GRM) FOR PERMANENT POTHOLE REPAIR SOLUTION UNDER REAL ENVIRONMENTAL CONDITION

AMOUNT: RM 91,200.00



TS. DR. MOHD RAIZAMZAMANI MD ZAIN

SYNERGISTIC EFFECTS OF GLASS FIBER REINFORCED POLYMER (GFRP) AND STEEL REINFORCEMENT ON THE MECHANICAL PROPERTIES OF SELF-COMPACTING CONCRETE UNDER ELEVATED TEMPERATURES

AMOUNT: RM 82,200.00



DR. HAZRINA MANSOR

DESIGN OPTIMIZATION AND ROBUSTNESS ANALYSIS OF LOCALLY MADE FARO LOGISTIC SUPPORT BRIDGE FOR EFFICIENT ECONOMICAL BRIDGE SOLUTION

AMOUNT: RM 318,973.00

INDUSTRY FUND



TS. DR. AZLINDA SAADON

WATER QUALITY NEAR IMPORTANT SEA TURTLE CONSERVATION AREAS IN THE PERHENTIAN ISLANDS MARINE PARK

AMOUNT: RM 29,000.00



ASSOC. PROF. IR. TS. DR. EKARIZAN SHAFFIE

BITUMEN PROPERTIES EVALUATION OF MODIFIED MIXES THROUGH ADVANCED CHARACTERIZATION

AMOUNT: RM 16,470.00



TS. DR. AZIANABIHA A HALIP

PETRONAS RESEARCH SDN. BHD. (PRSB)
MICROALGAE IN CO₂ CAPTURE AND RENEWABLE ENERGY

AMOUNT: RM 908,802.00



ASEAN BLUE INNOVATION CHALLENGE AWARD (ABIC-UNDP)

IR. TS. DR. NURUL FARIHA LOKMAN

SUSTAINABLE DEVELOPMENT OF ZERO EXCHANGE SYSTEM USING BIO-DHS FILTER INTEGRATED WITH IOT TECHNOLOGY FOR FISH FARMING

AMOUNT: RM 164,925.01



KURITA WATER AND ENVIRONMENT FOUNDATION (KWEF) 2024

IR. TS. DR. NG JING LIN

ARTIFICIAL INTELLIGENCE RAINFALL EROSION MODEL: TOOL FOR PRESERVING WATER RESOURCES AND ENVIRONMENT

AMOUNT: JPY 400,000.00



STRATEGIC RESEARCH PARTNERSHIP (SRP)

TS. DR. YAZMIN SAHOL HAMID

MECHANICAL AND PHYSICAL PROPERTIES OF THIXOTROPIC AND ROOM TEMPERATURE CURED EPOXY-BASED ADHESIVE WITH AND WITHOUT THE ADDITION OF NANO-FILLERS: BAMBOO FIBERS, GLASS LIQUID RUBBER

AMOUNT: RM 50,000.00



THE OCEAN CLEANUP INTERCEPTION

ASSOC. PROF. IR. DR. AMNORZAHIRA AMIR

INTERCEPTOR CATCH SUBSAMPLING (OSPAR PROTOCOL)

AMOUNT: RM 12,600.00



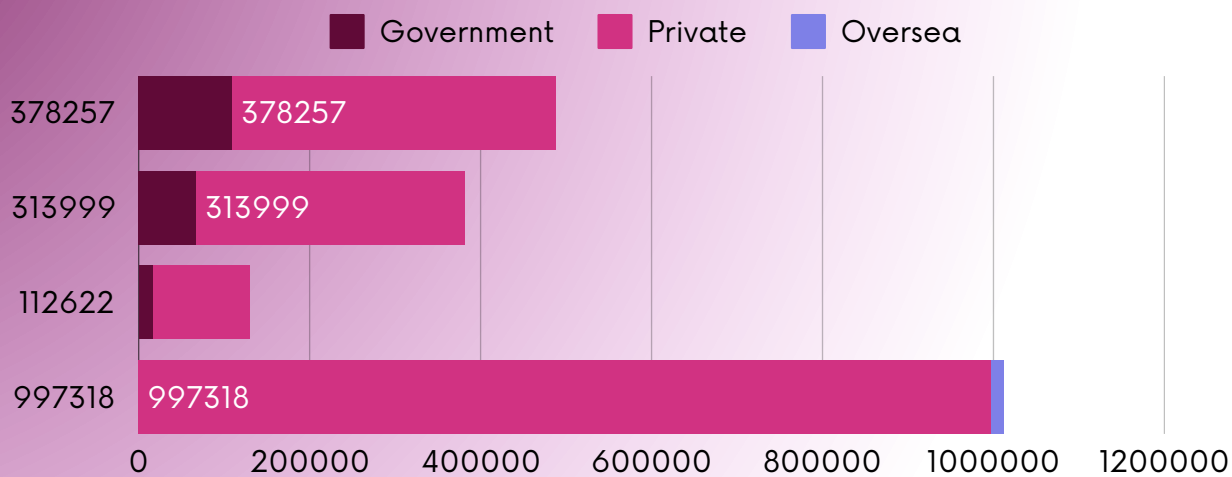
THE OCEAN CLEANUP INTERCEPTION

TS. DR. AZLINDA SAADON

ENVIRONMENTAL MONITORING AND TRAINING OF TRAINERS (TOT) IN CHAO PHRAYA RIVER, THAILAND

AMOUNT: RM 50,452.50

CONSULTATION



Students
**ACADEMIC
ACHIEVEMENTS
&
ACTIVITIES**

MENARA

KOMPLEKS REJUTERAPAN
TUANKU ABDUL HALIM
MUJADZAM SHAH

Students ACHIEVEMENTS



Dr. Nurul Elma is a prominent academic and researcher in Civil Engineering, known for her excellence in education and contributions to the field. She completed her Diploma in Civil Engineering in 2006 with a CGPA of 3.71, earning the Dean's Award throughout her studies. She went on to earn her Bachelor's degree in Civil Engineering from UiTM Shah Alam in 2009 and a Master's degree in Transportation and Logistics in 2010 under the Young Scientist Researcher sponsorship.

Since joining the Malaysia Institute of Transport (MITRANS) in 2013, Dr. Nurul Elma has served in various leadership roles, including Head of the Transportation and Logistics Laboratory and Postgraduate Program Coordinator (Coursework), and Head of the Construction Business Project Management (CBPM) field. She has also collaborated with notable government agencies, such as PRASARANA, MAHB, and TNB, often delivering professional talks.

Over her decade-long career, Dr. Nurul Elma has led numerous research projects and published more than 50 papers in high-impact journals like Construction Management and Economics Journal and Frontiers in Built Environment. She has been recognized with several prestigious awards, including a Silver Award at IDEX2021 and a Gold Award at IDEX2023. Her research has gained international recognition, notably being presented at the Association of Researchers in Construction Management (ARCOM) in the UK in 2019 and 2022.

Dr. Nurul Elma's extensive contributions to research, education, and industry collaboration have solidified her reputation as a leader in Civil Engineering and Transportation studies.

Nur Syaza Ilyana is an accomplished civil engineer with an exceptional academic and professional track record. She pursued her studies in Civil Engineering at Universiti Teknologi Petronas, UiTM Pahang (Jengka Campus), and UiTM Shah Alam, where she was named the Best Student (Overall) at both institutions. She earned numerous accolades, including the Best Engineering Graduate Award UiTM 2023, the IEM Gold Medal Award 2022, and the Gold Medal Award at the ASVF International Innovation Competition 2020 in Seoul, Korea.

Syaza Ilyana actively engaged in leadership roles during her time at UiTM, including serving as Vice President of the Civil Engineering Student Association (SMFPKA) and Head of the Corporate and Communications Department in UiTM Pahang's Student Representative Council Secretariat. She also contributed as a panel speaker, sharing expertise on resume writing, interviews, and scholarships, which earned her a position as an Ambassador for the GRADUAN Ambassador Programme in 2021.

A recipient of the GAMUDA Foundation scholarship, she began her career as a traffic engineer at GAMUDA Engineering and now serves as a Civil and Structural Engineer at Petrofac Engineering Services. Syaza Ilyana holds professional certifications, including Certified BIM Modeler by CIDB Malaysia, Graduate Engineer by BEM, and Graduate Technologist by MBOT. Her dedication to excellence, leadership, and professional growth makes her a role model in the engineering field.



ANUGERAH THESIS TERBAIK SUMBER AIR DAN HIDROLOGI IPT PERINGKAT KEBANGSAAN

The Best Water Resource and Hydrology Thesis Award for Higher Education Institutions at the National Level was presented in conjunction with the National World Rivers Day 2024, held on 21st September 2024 at Sungai Tebrau, Johor Bahru. The event was officiated by YAB Dato' Sri Haji Fadillah bin Haji Yusof, the Deputy Prime Minister and Minister of Energy Transition and Water Transformation (PETRA). Also in attendance was YAB Dato' Onn Hafiz bin Ghazi, the Menteri Besar of Johor, who hosted this year's National World Rivers Day celebration.

The Best Water Resource Thesis Award was won by two students from the School of Civil Engineering, College of Civil Engineering, UiTM:



Silver Medal was awarded to **Dr. Intan Shafeenar binti Ahmad Mohtar** in the Doctor of Philosophy category, under the supervision of Prof. Dr. Wardah Tahir. Her thesis, titled **Quantitative Precipitation Forecast Using NWAP WRF-ANN Model For Hydrometeorological Flood Forecasting**, earned her RM 800 in cash and a certificate of recognition.



Bronze Medal was awarded to **Muhamad Fazlan bin Zulkafli** in the Bachelor's Degree category, supervised by Ts. Dr. Azlinda Saadon. His thesis, titled **Riverbank Erosion Under Variation of Channel Morphology: A Case Study for Sungai Bernam**, won him RM 350 in cash and a certificate of recognition.

GLOBAL CAMP OSAKA, JAPAN



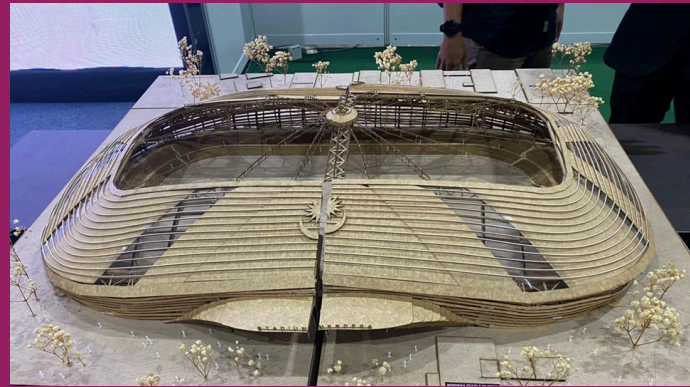
Sharifah Aina Hazlin Syed Hassan has been selected to join the Global Camp at Osaka, Japan from 25th till 30th August 2024. This summer camp program is organized by the National Institute of Technology (NIT), Kochi College, Japan. Several universities from several countries in Asia have been invited to this Global Camp. The purpose of this Global Camp is to expose students to "Designing Future Society" and exposure to the elements of "Sustainability Development Goals (SDG)" in Osaka, Japan. . The students involved were fully sponsored by NIT, except for the Global Camp fee.





UiTM Triumphs with Second Place at MSA-CIDB OIC 2024!

UiTM has won Second Place at the prestigious MSA-CIDB Open Ideas Competition (OIC) 2024 for the project titled "Sustainability in Steel Construction Industry – Restoration & Evolution of Merdeka Stadium". This remarkable achievement was made possible through the outstanding collaboration between the students of the College of Engineering and the College of Built Environment. Their dedication, teamwork, and excellence have earned this prestigious recognition and a cash prize worth RM7000.



UiTM Secures Second Runner-Up in the 2024 #ShellSelamatSampai Varsity Challenge



Universiti Teknologi MARA (UiTM) proudly achieved second runner-up in the 2024 #ShellSelamatSampai Varsity Challenge, themed "Innovative! Captivate! Save Lives!" This prestigious competition encourages Malaysian university students to develop STEM-based solutions addressing road safety. The UiTM team, from the School of Civil Engineering, comprised Mohamad Syazwan Afiq bin Johar, Nur Sorfina binti Ahmad Rifan, Nur Syuhaila binti Abdul Razak, and Ilman Danial bin Mohd. Jamsari Azman. Guided by Assoc. Prof. Dr.-Ing. Masria Mustafa, their project focused on enhancing motorcycle rider safety, earning them RM3,000 in prize money.

Competing against top universities like Curtin Malaysia and Universiti Malaya, the team demonstrated creativity, teamwork, and dedication. Shell Malaysia's programme awarded RM1,000 seed funding to the top 20 teams to develop their prototypes, with two UiTM teams advancing, including one in the top six. This success underscores UiTM's commitment to fostering innovation, preparing graduates to address real-world challenges, and contributing to societal well-being.

Gold Award at the International Virtual Undergraduates Competition on Technological Innovation (iVUTI2024)

A team including Donald Anak Joseph, Sapnarovina Anak Bayang, Ahmad Mursyid Norman, Ir. Ts. Dr. Anizahyati Alisibramulisi (FYP Supervisor), and Mr. Awi Shahadan (Industry Partner) was awarded the Gold Award in the "International Virtual Undergraduates Competition on Technological Innovation 2024 (iVUTI 2024)" for their project titled "Drain Cover of Steel Fiber Reinforced Concrete vs. Rebar: Which is Better?". The project, involving industry visits and collaboration with experts, emphasized practical learning, with support from Cement Industries of Malaysia and Master Builders Solutions Malaysia, reinforcing students' industry knowledge and innovative construction solutions.





Exchange Student Program between UiTM and Universitas Islam Indonesia

School of Civil Engineering (SCE) have signed a Memorandum of Agreement (MoA) with Universitas Islam Indonesia (UII), Indonesia in 2023. This MoA focuses on the student exchange program (inbound and outbound) between the SCE and UII. The representative for this MoA is Dr. Hazrina Mansor. For semester October 2024 - January 2025, SCE have received two inbound students from UII, Bagawi Al-Alief and Hidayat Dwi Ashari. Additionally, SCE have sent two students to UII's summer program: Hafshah A'qilah Hilmi A'dli and Alysa Hanna Hairul Azman, who participated in the "Geo-Adventures 2024: Discovering Geohazards and Mitigation Strategies" program from 2nd to 7th September 2024. All participants were fully sponsored by UII. This MoA has strengthened the collaboration between UiTM and UII, and we hope more students and staff from SCE will participate in future exchange programs and other activities.



Sakura Science Exchange Program - Akita Prefectural University 2024



From 8th to 14th December 2024, seven students from the School of Civil Engineering were honored to participate in a prestigious program organized by the Japan Science and Technology Agency. The program was hosted by the Department of Architecture and Environment Systems, Faculty of Systems Science and Technology, Akita Prefectural University, Japan.

During the program, the students engaged in a variety of enriching activities. These included professional lectures on wood rehabilitation and practical training in the restoration of traditional houses, sessions on disaster management and wood technology, and interactive communication with members of Akita Prefectural University's English Club.

The program concluded with a memorable visit to the historic Samurai heritage area. The students also had the opportunity to enhance their communication skills through engaging activities with students from Akita Minami High School and Akita Minami 'Chotubu' Junior High School.





CEEC 240

RAIL JOURNEY ACCROSS KLANG VALLEY: BTECH STUDENTS EMBARK ON AN EDUCATIONAL EXPLORATION OF MALASIA'S TRAIN SYSTEM

On 12th December 2024, a group of 21 Bachelor of Technology students specializing in Railway Infrastructure Engineering from UiTM, along with three lecturers, embarked on an extraordinary educational journey through Malaysia's intricate railway systems. The program, aptly titled Rail Journey Across Klang Valley, offered the students a hands-on experience with the nation's diverse train services, including KTMB (Keretapi Tanah Melayu Berhad), LRT, MRT, and ERL.

This initiative, led by Associate Prof. Ir. Dr. Norliyati Mohd Amin, marked a significant milestone for the first cohort of students enrolled in the Railway Infrastructure Engineering program. Dr. Norliyati emphasized the importance of the activity, stating, "This hands-on exposure equips students with foundational knowledge and provides their first encounter with operational railway systems before delving into advanced topics."

*A journey by train is an adventure
in itself*



En. Muslizam, Director of Sustainable Rail and Talent Development at the Malaysia Rail Development Corporation

The students explored various train networks, guided by En. Muslizam, Director of Sustainable Rail and Talent Development at the Malaysia Rail Development Corporation. The meticulously planned route included stops at KTMB Komuter Shah Alam, KTMB Subang Jaya, LRT Subang Jaya, LRT Masjid Jamek, and LRT Titiwangsa. The journey then transitioned to the Monorail at Titiwangsa, MRT from Muzium Negara to Tun Razak Exchange and Sungai Besi, and connections to LRT and ERL at Tasik Selatan, culminating at KL Sentral before returning to Shah Alam.

Dr. Nuryantzpura highlighted the program's analytical component, which tasked students with observing rail service quality and performance, focusing on infrastructure, operational efficiency, and sustainability. By comparing the systems, students identified key strengths and areas for improvement, gaining valuable insights into Malaysia's modern urban transit framework. The activity underscored critical differences in infrastructure, rolling stock, station design, and electrification across service providers, offering a practical lens into the complexities of interconnected urban transit systems.

This initiative reflects UiTM's commitment to nurturing the next generation of railway infrastructure professionals, aligning with Malaysia's expanding rail industry demands.

Design, Build, Innovate: Inspiring Future Engineers through Hands-On Learning and Sustainability



A Dive Into Engineering program was successfully conducted on 9th November 2024 at Sekolah Menengah Sains Kuala Selangor (SMSKS), Selangor. This program was led by Mohamad Syahmeer Mohd Sha'izan, the program director, with the guidance and support of Dr. Nurul Noraziemah Mohd Pauzi, as the program advisor.

Participants engaged with engineering principles, water quality science, flood risk solutions, and theodolite navigation, creating a highly enriching experience. The event concluded with a prize-giving ceremony, marking a successful and impactful day.

It aimed to inspire secondary students to consider engineering careers, bridging theoretical knowledge with real-world applications through interactive, and hands-on activities. It aimed to inspire secondary students to consider engineering careers, bridging theoretical knowledge with real-world applications through interactive, hands-on activities. The event successfully highlighted engineering's role in addressing global challenges and motivated students to pursue innovation, creativity, and problem-solving in engineering disciplines.

Karnival STEM 2024, at SMK Telok Panglima Garang



On 28th November 2024, the Karnival STEM 2024 under the SULAM initiative was successfully held at SMK Telok Panglima Garang. The event was participated by 30 of School of Civil Engineering, UiTM Shah Alam students and three academic advisors: Ir. Ts Dr. Nuryazmeen Farhan, Dr. Intan Shafeenar Ahmad Mohtar, and Dr. Noraini Mat Budari. The program featured exciting activities included the STEMStruct: Crafting Bridges, Building Futures competition, interactive exhibitions, and tree planting activities.



Blossoming Sustainability: Civil Engineering Eco-Innovations of Laman Seri Orked Lestari



On 30th November 2024, the Program Kelestarian UiTM Cawangan Selangor (UCS) and Laman Seri Orkid Lestari Launch showcased final-year Civil Engineering students' commitment in championing sustainability and innovation. This sustainable solution was designed to address the garden's urgent need for sufficient water supply to nurture its diverse orchid collection.



The launch of Laman Seri Orkid Lestari is organised by Research and Innovation Department UCS and co-organised with the School of Civil Engineering UiTM Shah Alam and Faculty of Pharmacy UCS. This project was led by Ts. Dr. Janmaizatulriah Jani, together with five (5) co-advisors working on mini projects including Catch the Rain: Design for a Greener Future & Installation for a Greener Future, Concrete Waste Bench, AquaCure: EM Mudball Lake Treatment, From Waste to Bloom and Bamboo Bench Builder. Supported by key stakeholders and community partners, the initiative emphasized sustainable practices, leaving a lasting impact on environmental consciousness and reinforcing UiTM's dedication to sustainability and innovation.



30 Civil Engineering Students Build a Timber House in 3 Days!

▶▶▶ The three-day project, from 6th to 8th December 2024, involved 30 student volunteers from the School of Civil Engineering, College of Engineering, UiTM Shah Alam in building the timber home. This program was carried out in collaboration with EPIC Homes, DeXandra, and the Malaysian Timber Council (MTC). This hands-on project not only enhances their technical skills but also fosters community engagement, making a tangible difference in the lives of the Orang Asli community.

The volunteering project is led by Ahmad Farhan Mohd Faizam, with Ts. Dr. Yazmin Sahol Hamid as the lead supervisor, alongside a dedicated team of seven School of Civil Engineering lecturers, Prof. Zakiah Ahmad, Assoc. Prof. Ir. Ts. Dr. Mohd Khairul Kamarudin, Dr. Nursafarina Ahmad, Dr. Hazrina Mansor, Dr. Mohd Raizamzamani Md Zain, Ir. Noorfaizah Hamzah & Dr. Nurbaiah Mohammad Noh.



Little Engineers, Bright Minds: SULAM Project with Anak Yatim and Asnaf As-Solihin

▶▶▶ On 20th December 2024, 25 of School of Civil Engineering students from UiTM Shah Alam organized the "Little Engineers, Bright Minds" community engagement program at Rumah Anak Yatim dan Asnaf As-Solihin, Kanchong Darat. Supervised by Dr. Nor Azmi Bakhary and Ts. Dr. Rusdi Rusli, the program featured age-appropriate activities on road safety and engineering principles. This program aim to introduce young learners to engineering concepts in a fun and engaging way.

In addition to fostering an interest in engineering careers, these activities also focus on promoting road safety awareness among children. As pedestrians, children are at a higher risk on the roads, and educating them on safe practices is essential. Furthermore, these initiatives provide an opportunity for UiTM students to engage with the local community, allowing them to share their knowledge while making a positive impact on society

Promoting Education for Zero Hunger (SDG 2) and Partnerships for the Goals (SDG 17)

▶▶▶ On 30th December 2024, 22 enthusiastic students led by Mohd Amar Rusmani took the initiative to organize a meaningful community program at SMK Rawang, Selangor. This program aimed to educate and raise awareness among school teenagers about the importance of consuming nutritious food—a crucial aspect of achieving Zero Hunger, one of the United Nations Sustainable Development Goals (SDG 2), and the collaborative spirit of SDG 17 (Partnerships for the Goals).

A total of 30 secondary school students actively participated in this engaging event. The highlight of the program was the practical solution introduced by the UiTM students: a self-sustaining aquaponic system integrated with a rainwater harvesting system. In addition, the Parents and Teachers Association (PTA) of SMK Rawang generously provided financial support, ensuring the program's smooth execution. The collaboration between UiTM students, the school, and the PTA exemplifies how teamwork can create impactful change in local communities.

Stay Connected

Reach out to our dedicated team for any inquiries, assistance, or information you need.

pkashahalam@uitm.edu.my 

School of Civil Engineering
College of Engineering
Universiti Teknologi MARA
40450 Shah Alam
Selangor, Malaysia



+603-55435248



engineering.uitm.edu.my/civil



Pengajian Kejuruteraan Awam, Kolej Kejuruteraan -
Media Rasmi



@pengajian_kejuruteraan_awam



School of Civil Engineering, UiTM



uitmpka



E-NEWSLETTER SCHOOL OF CIVIL ENGINEERING is half-yearly published, twice a year collectively. All right reserved.

Published by

2024, SCHOOL OF CIVIL ENGINEERING, COLLEGE OF ENGINEERING, UiTM.