

FKA e-BULLETIN

**Innovating Civil Engineering
for a Better Tomorrow**

2025



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

**FAKULTI
KEJURUTERAAN
AWAM**

Faculty of Civil Engineering

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Salam Aidilfitri 1446 H / 2025 M

DARIPADA JAWATANKUASA PENGURUSAN FKA
MAAF ZAHIR DAN BATIN

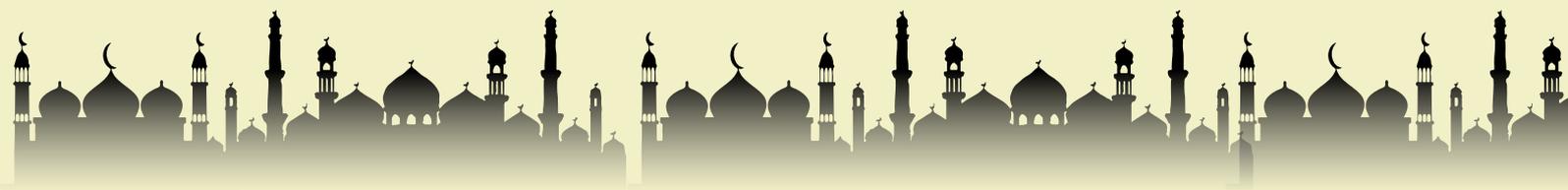


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Welcome to the latest issue of our bulletin, where we celebrate the remarkable achievements and vibrant life at the Faculty of Civil Engineering, Universiti Teknologi Malaysia. This March 2025 edition is a testament to the continuous passion, commitment, and innovative spirit that fuel our faculty's growth and success. In this issue, we shine a spotlight on some of the bold and incredible events organized within the faculty - activities that are not only intellectually stimulating but also deeply rooted in community building. From impactful seminars and research showcases to exciting competitions and student-led initiatives, these moments reflect our unwavering dedication to fostering innovation, collaboration, and a spirit of inquiry towards lifelong learning. Our students and staff have once again demonstrated outstanding talent and leadership across multiple domains. Notable achievements include groundbreaking research contributions, regional and international collaborations, and outreach activities that bring civil engineering solutions closer to real-world needs. These stories highlight how our faculty continues to evolve and respond to the global challenges of modern infrastructure, sustainability, and smart technology integration. We are especially proud of our students, who remain at the heart of every success story. Their curiosity, resilience, and passion for learning are reflected in their participation in competitions, community service projects, and academic excellence. Likewise, our academic and administrative staff have been unwavering in their efforts to provide high-quality education and mentoring that guide our students toward becoming future-ready civil engineers. This issue also introduces inspiring interviews, new research breakthroughs, and feature articles that provide insights into the ongoing progress within the faculty. We believe these contributions not only enrich our readers' perspectives but also ignite ideas for future innovation and collaboration. As always, we invite you to delve into these stories and join us on the continuous journey toward excellence that defines Universiti Teknologi Malaysia. Let us celebrate our collective achievements and look forward to even greater milestones in the months to come. Thank you for your continued support, and we hope you enjoy this special edition.

Hilmy Naim

Ir. Ts. Dr. Mohd Hilmy Naim bin Mohd Yakin
Editor-in-chief



WELCOME FROM THE DEAN



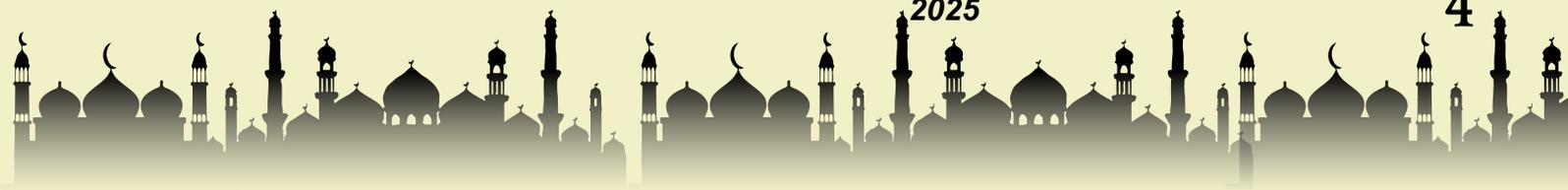
Assalamualaikum Warahmatullahi Wabarakatuh and Greetings to all,
It is my sincere pleasure to welcome you to the First 2025 Edition of the Faculty of Civil Engineering (FKA), Universiti Teknologi Malaysia (UTM) e-Bulletin.

Whether you are a student, academic staff member, researcher, industry partner, alumni, or simply someone passionate about civil engineering, I extend my heartfelt appreciation for your interest in our faculty. Through this platform, we aim to highlight the latest updates, achievements, and initiatives that reflect the dedication and dynamism of the FKA community.

As the Dean of FKA UTM, I am proud to share the remarkable progress our faculty continues to make in education, research, and innovation. This bulletin serves not just as an information hub, but as a window into the vibrant academic and professional life within our faculty - where ideas are nurtured, collaborations are formed, and the future of civil engineering is continuously shaped.

Thank you for joining us on this journey. I invite you to explore, engage, and be inspired by what FKA UTM has to offer.

Assoc. Prof. Dr. Suhaimi Abu Bakar
Dean
Faculty of Civil Engineering,
Universiti Teknologi Malaysia
2025



FKA'S HISTORY



The history of the Faculty of Civil Engineering dates back to 1904, beginning as a technical study class held at the City Hall building in Kuala Lumpur. Two years later, this class evolved into a Technical School based at the Batu Lane Malay School. By 1925, the Technical School expanded its courses to train staff from the Public Works Department of Malaysia, the Railway Department, the Survey Department, and the Drainage and Irrigation Department. Graduates were awarded the Civil Engineering Certificate, which qualified them to sit for the professional examinations Part I and II administered by the Institution of Civil Engineers (ICE) in the United Kingdom.

In 1948, the Technical School was upgraded to become the Kuala Lumpur Technical College, offering a three-year diploma course. Graduates from this program were exempted from taking the Part I professional examination. A significant milestone occurred in March 1955 when the college moved to Jalan Gurney. On March 14, 1972, the college was granted university status and renamed as Institut Teknologi Kebangsaan (ITK). Diploma and bachelor's degree programs in civil engineering were offered under the Civil Engineering Department.



On April 1, 1975, when ITK was renamed Universiti Teknologi Malaysia (UTM), the Civil Engineering Department was upgraded to become the Faculty of Civil Engineering. At that time, the faculty had three departments: the Department of Structures and Materials, the Department of Hydraulics and Hydrology, and the Department of Geotechnics and Transportation. In early 1976, another department was established — the Department of Environmental Engineering. A historical achievement came in 1977 when the faculty's bachelor's degree program received recognition from the Institution of Engineers Malaysia (IEM).

The faculty later moved to its new campus in Skudai in 1989. With a larger space and a well-equipped campus, academic activities including teaching, publication, consultation, and research flourished. Through consultancy and research, the faculty began to establish strong ties with the industry sector. In the early 1990s, the faculty took another significant step forward. While maintaining its core focus on education, research and postgraduate studies became crucial for shaping the future of the faculty. The number of postgraduate students increased over time, prompting the idea of establishing several centres of excellence to optimize the expertise in civil engineering available at the faculty.



FKA'S NUMBERS

118

ACADEMIC

89

SUPPORTING STAFF

998

UNDERGRADUATE
STUDENTS

153

POSTGRADUATE
INTERNATIONAL
STUDENTS

528

POSTGRADUATE
STUDENTS

FKA Spotlight:

Special Edition – International Women’s Day

In celebration of International Women’s Day, FKA proudly honors the remarkable contributions of women in academia and administration. This special edition highlights the most inspiring quotes from two outstanding individuals whose dedication and excellence have made a lasting impact on the faculty and beyond.



PROF EMERITUS DATUK TS IR DR SITI HAMISAH TAPSIR, FASc (UTM ALUMNI)

Prof Emeritus Datuk Ts Ir Dr Siti Hamisah Tapsir began her career as a lecturer at Universiti Teknologi Malaysia (UTM) in 1987. Throughout her tenure, she held several key positions, including head of laboratory, associate professor, assistant director, programme director, dean and deputy vice-chancellor. In 2009, she left UTM as campus director of UTM International Campus to join the Ministry of Higher Education as deputy director-general. She was later appointed director-general of Higher Education in 2017.

In 2019, she was appointed secretary-general of the Ministry of Energy, Science, Technology, Environment and Climate Change (now known as the Ministry of Science, Technology and Innovation, or MOSTI). Following a government restructuring in March 2020, she remained in the role until March 2021.

During UTM’s 64th convocation ceremony, Datuk Dr Siti Hamisah was conferred the prestigious title of emeritus professor in recognition of her outstanding contributions to academia and higher education.

She also served as an adjunct professor at UTM from Jan 2020 to 2021. In March 2021, she was reappointed as secretary-general of MOSTI, where she played a key role in shaping the national science, technology and innovation agenda. She also led Malaysia’s Covid-19 vaccination plan under the National Immunisation Task Force in 2021.

She later joined UCSI University, where she currently serves as vice-chancellor and president, as well as UCSI Group chief executive officer. In addition to her roles at UCSI, Dr Siti Hamisah serves as president of the Malaysia Board of Technologists. She also sits on the board of several public listed companies like Sime Darby Motors Sdn Bhd, Oppstar Berhad and Malayan Cement Berhad. She was also a board member of the Kumpulan Kitacon Berhad, Malaysian Industry-Government Group for High Technology, the Malaysia Board of Technologists, MIMOS, the Institute of Integrity Malaysia, Universiti Malaya, Universiti Malaysia Perlis, Universiti Malaysia Sabah and Universiti Teknologi MARA.

Events & Activities



VISIT FROM KOREA UNI.

FKA received a visit from Korea University on January 7, 2025. A discussion on joint research with the FKA management was held in the morning session at the CRCE Meeting Room, Hydraulic Laboratory.

In the afternoon session, Prof. Dr. Jinho Jung conducted a sharing session titled Research Activities of Water Quality Laboratory at Korea University for FKA staff and students.



FKA COLLOQUIUM

The Bridging Civil Engineering Insights colloquium, held on January 21, 2025, at the Smart Classroom, Faculty of Civil Engineering, provided a platform for Master's and PhD students from Universiti Teknologi Malaysia (UTM) and Universitas Islam Sultan Agung (UNISSULA) to exchange knowledge and research ideas. Covering key topics such as geotechnics, structures, materials, water and the environment, transportation and highways, and construction management, the event fostered academic collaboration and networking among postgraduate students, encouraging discussions on innovative solutions and advancements in civil engineering.



VISIT FROM UMY

Universitas Muhammadiyah Yogyakarta (UMY) conducted a working visit to the Faculty of Civil Engineering (FKA) on February 7, 2025. The visit included a meeting at the Main Meeting Room, followed by a tour of selected laboratories within FKA. This visit aimed to strengthen academic collaboration and provide insights into FKA's research facilities.

Events & Activities



IAP WORKSHOP

On January 22 & 23, 2025, FKA had organized the Industry Advisory Panel Workshop and Meeting at Hotel Dorsett, Putrajaya. This annual workshop aims to gather insights, reviews, advocacy, and support from industry representatives regarding faculty programs, courses, strategic direction, and overall objectives. Additionally, it serves as a platform to strengthen collaboration between academia and industry, ensuring that the faculty's curriculum aligns with current industry needs and future challenges. The engagement also fosters opportunities for research partnerships, student internships, and knowledge exchange, enhancing the faculty's contribution to the civil engineering field.



INDUSTRY VISIT

On 8 January 2025, PTRG research group had the honor of welcoming representatives from Selia Selenggara Engineering Sdn. Bhd. to the Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM). The visit served as a valuable platform for discussions on potential collaborations, focusing on research advancements, industry-driven projects, and knowledge-sharing initiatives. Both parties explored opportunities for joint research projects, student engagement programs, and professional training to bridge the gap between academic research and real-world engineering applications.

Events & Activities



I-FIRE 2025

Universiti Teknologi Malaysia (UTM) proudly hosted the International Fusion Invention Research Exhibition (i-FIRE) 2025, an inspiring event showcasing groundbreaking innovations, creativity, and research excellence.

i-FIRE 2025 was a collaborative effort between the Faculty of Civil Engineering (FKA) and the Faculty of Management (FM), bringing together talents from diverse disciplines. Held at the Dewan Konvensyen, Faculty of Management, this year's exhibition celebrated the theme Emerging Technologies: Shaping the Next Era of Discovery, providing a platform for students and academicians to explore innovative solutions to today's pressing challenges.

This year's event also featured a strong partnership with the Pavement and Transportation Research Group (PTRG) and Strategi Society, further expanding its reach and impact. A highlight of i-FIRE 2025 was the exciting integration of the Rail Tech Expo 2025 as one of its core chapters. Building on the success of Rail Tech Expo 2024, this expansion broadened the exhibition's scope, fostering greater collaboration and knowledge exchange in the field of railway technology engagement.



MOU SIGNING

Universiti Teknologi Malaysia (UTM) and Chongqing University's School of Civil Engineering signed a Memorandum of Understanding (MoU), marking a new chapter in academic collaboration. This partnership fosters academic exchanges and research in sustainable development, symbolizing a shared commitment to innovation and global cooperation.

Led by Assoc. Prof. Ir. Dr. Rini Asnida and Dr. Mohd Nurasmawisham, UTM's delegation visited the Chongqing Research Institute of Green and Low-Carbon Energy. Hosted by Vice Director He Keqiang, discussions focused on research collaboration, talent development, and advanced infrastructure.

Assoc. Prof. Dr. Izni Syahrizal and Dr. Afikah visited Chongqing Vocational College to enhance academic cooperation. The meeting explored mutual opportunities, reinforcing UTM's commitment to expanding global partnerships.

Events & Activities



TECHNICAL VISIT

On February 5, 2025 (Wednesday), representatives from the Hydraulic and Hydrology Research Group (HHRG), Faculty of Civil Engineering (FKA), Universiti Teknologi Malaysia (UTM) - Dr. Ponselvi Jevaragagam and Dr. Mohd Ridza visited the Sultan Iskandar Water Treatment Plant (LRA) in Pasir Gudang, Johor.

The visit aimed to enhance their technical knowledge of water treatment processes and gain deeper insights into the plant's operations. Additionally, it served to strengthen corporate relations between UTM, Pengurusan Aset Air Berhad (PAAB), and Ranhill Syarikat Air Johor Sdn Bhd (RSAJ). This collaboration fostered knowledge sharing and explored potential future partnerships in water resource management.



EM INFO DAY 2025 IN MYANMAR

UTM/FKA participated in the YES2Malaysia: The Biggest Education Malaysia Info Day 2025 in Myanmar from January 23 to January 29, 2025.

Held in Yangon, the event aimed to promote academic programs and recruit prospective students. This initiative provided an opportunity to engage with students, showcase UTM's excellence, and strengthen educational ties between Malaysia and Myanmar.



COLLABORATION WITH JPS

A collaboration meeting was held with JPS Johor to enhance flood forecasting methods and water resource management. Researchers Dr. Ponselvi and Sr. Gs. Ts. Dr. Mohd Radhie from HHRG aimed to promote knowledge-sharing and the integration of advanced technologies like IoT and AI. The discussion focused on flood hotspot study areas such as Skudai, data sharing, and potential research collaborations in Johor. This initiative seeks to develop innovative solutions for effective flood mitigation and sustainable water management.

Events & Activities



APSEC CONFERENCE

The Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM) Johor Bahru, proudly hosted the 11th Asia-Pacific Structural Engineering & Construction Conference 2025 (APSEC 2025) at The Everly Putrajaya. This prestigious event served as a dynamic platform for global experts, researchers, and industry professionals to exchange knowledge and explore the latest advancements in structural engineering.

With the theme *“Bridging Innovation and Sustainability for Tomorrow’s Infrastructure,”* APSEC 2025 highlighted the critical role of innovation and sustainability in shaping future infrastructure. The conference featured insightful keynote sessions, technical presentations, and discussions on emerging trends and challenges in structural engineering and construction.

The event commenced with welcoming remarks from YBrs. Prof. Ts. Dr. Edy Tonnizam Mohamad, Deputy Vice-Chancellor (Development), who emphasized the importance of knowledge-sharing and collaboration in driving engineering advancements. This was followed by an officiating speech by Yang Berhormat Dato’ Seri Alexander Nanta Linggi, Minister of Works, who underscored the need for sustainable solutions in addressing infrastructure challenges.

APSEC 2025 also provided a valuable networking opportunity for participants, fostering academic-industry collaborations and strengthening professional connections. The Faculty of Civil Engineering, UTM, extends heartfelt appreciation to all sponsors, esteemed speakers, and participants for their contributions in making this event a resounding success. Congratulations to everyone involved in APSEC 2025, and we look forward to continuing this journey of innovation and excellence in the years to come!

Events & Activities



USER TRAINING SESSION

The User Training Session: Exploring the ICE Virtual Library Platform was held on March 19, 2025, at 10:00 AM in PBL 1. The session featured insightful presentations by Ms. Bernice Wong, Business Manager from Emerald Publishing, and Ms. Syazwani Syamimi Mat Pauzi, Librarian from Perpustakaan Sultanah Zanariah. They provided valuable guidance on navigating the ICE Virtual Library, maximizing its resources, and utilizing key features for research and academic purposes. This training aimed to enhance participants' understanding of the platform, enabling them to efficiently access high-quality engineering and construction-related literature. Attendees benefited from hands-on demonstrations and expert tips to improve their research experience.



COLLABORATION WITH BAKAJ

A collaboration visit and discussion were held with Badan Kawalselia Air Negeri Johor (BAKAJ) to explore research and teaching opportunities. Key areas of potential collaboration included dam management, optimization, water quality related to floating solar panels, and monitoring systems in dams. Other topics discussed were dam break analysis, including inundation and travel time, as well as student internships and teaching visits. The meeting took place on Wednesday, 5th March 2025, at Level 4, Bangunan Dato' Mohamad Ibrahim Munsyi, Pusat Pentadbiran Kota Iskandar, Johor. This engagement aimed to foster knowledge-sharing and strengthen partnerships in water resource management.



STRATEGIC PLANNING WORKSHOP

The Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM) Johor, organized a Pre-Strategic Planning Workshop 2025 on Thursday, 13 February 2025, from 9:30 AM to 5:00 PM at Blok M46, PBL 1, FKA. The workshop aimed to discuss and outline key strategies for the faculty's future direction. It provided a platform for faculty members to engage in discussions on academic excellence, research development, industry collaboration, and institutional growth. Through this session, valuable insights and recommendations were gathered to strengthen the faculty's strategic planning efforts for the coming years.

Events & Activities

MOU SIGNING CEREMONY

The Memorandum of Understanding (MoU) signing ceremony between Universiti Teknologi Malaysia (UTM) and The Institution of Fire Engineers (IFE) (UK) Malaysia Branch (IFEM) was held as a commitment to strengthening, promoting, and developing collaborative initiatives between both parties in the field of fire engineering for a period of five years until 2030.

The ceremony, held in the Main Meeting Room, witnessed the agreement being signed by UTM Vice-Chancellor, Prof. Dr. Mohd Shafry Mohd Rahim, and IFEM President, Ir. Lee Kong Fan, with the presence of delegates from both organizations. Prof. Dr. Mohd Shafry expressed his appreciation to IFEM, particularly to the President and attending representatives, as a symbol of shared dedication to advancing academic excellence and fostering opportunities in research, innovation, and education related to fire engineering and safety.

He further stated that IFEM has chosen the Faculty of Civil Engineering (FKA), UTM as its key collaboration partner in implementing this initiative, particularly from the early design stage to disaster management, ensuring fire-resistant construction.



MOU WITH JCEC SDN. BHD.

Universiti Teknologi Malaysia (UTM) and JCEC Sdn. Bhd. officially signed a Memorandum of Understanding (MoU) on 21st March 2025 at the Sultan Ibrahim Chancellery Building. The ceremony, held from 10:00 AM to 11:00 AM, aimed to strengthen collaboration in research, technology development, and industry-academic partnerships. This agreement will foster knowledge exchange, innovation, and potential joint projects between UTM and JCEC Sdn. Bhd. The partnership reflects a shared commitment to advancing research and professional development, benefiting both institutions and the wider community.



Events & Activities



KULIAH DHUHA: RAMADAN

The Faculty of Civil Engineering Family Club recently organized a spiritual talk titled "Kuliah Dhuha: Ramadan – A Month of Devotion and Forgiveness." The event took place on Friday, March 7, 2025, from 9:00 AM to 10:30 AM at PBL Room 1, M46.

The session was delivered by Dr. Idris bin Ismail, who emphasized that the essence of Ramadan lies in strengthening our connection with the Quran. He highlighted that as Ramadan is known as the month of the Quran, it is an opportunity for Muslims to engage deeply with its teachings by continuously reading and reflecting upon it.

This enlightening talk served as a reminder of the spiritual significance of Ramadan, encouraging attendees to embrace the holy month with sincerity, devotion, and a renewed commitment to the Quran.



KURMA AND BUBUR LAMBUK DISTRIBUTION

In celebration of Ramadan, the Kelab Keluarga Fakulti Kejuruteraan Awam (KKFKA) organized a special initiative to share the spirit of the holy month with its staff. Kurma (dates) and bubur lambuk, a traditional porridge, were distributed to all faculty members as a gesture of appreciation and togetherness. Led by FKA's management and staff volunteers, the event fostered a sense of unity and goodwill within the faculty. This annual tradition not only strengthens bonds among colleagues but also reflects the values of generosity and sharing during Ramadan.



DONATION TO FLOOD VICTIMS

KKFKA organized a donation drive for flood victims in Johor Bahru on Wednesday, 26th March 2025. Led by Dr. Eliza and several staff members from FKA, the team distributed essential supplies, including clothing and cooking items, to those affected by the disaster. This initiative aimed to provide much-needed relief and support to the flood victims, demonstrating KKFKA's commitment to community welfare and solidarity during difficult times.

New Professional Engineer (PE)



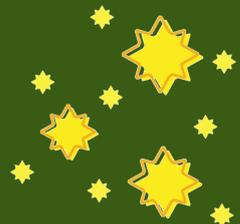
The entire Faculty of Civil Engineering community extends our heartfelt congratulations to:

1. Assoc. Prof. Ir. Dr. Norhisham bin Bakhary
2. Ir. Dr. Nor Eliza binti Alias
3. Ir. Dr. Mohd Azlan bin Mohd Yusoff
4. Ir. Ts. Dr. Nor Hasanah binti Abdul Shukor Lim
5. Ir. Ts. Dr. Nor Azidawati binti Haron
6. Ir. Ts. Dr. Josilva a/l M Munianady

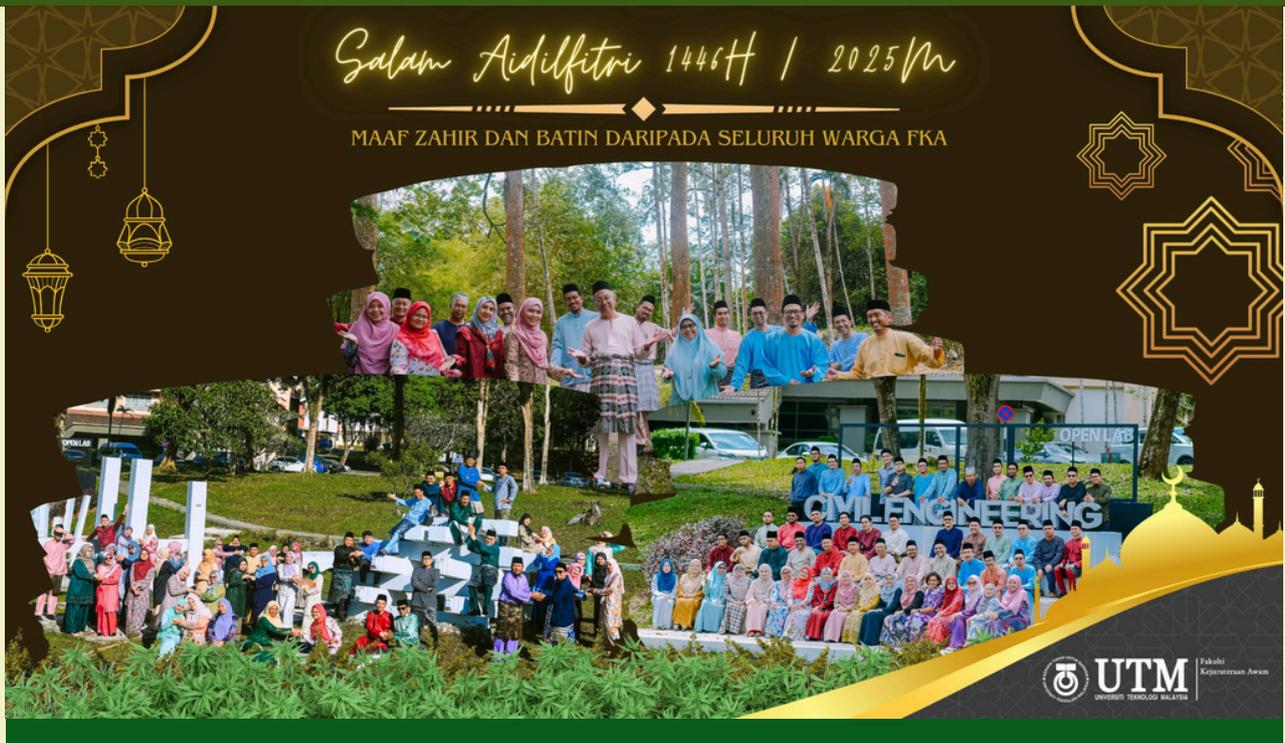
on being awarded the title of Professional Engineer (Ir.)

May this achievement serve as a catalyst for excellence and continue to inspire advancements in the field of engineering.





Eid al-Fitr Wishes



We would like to wish Selamat Hari Raya Aidilfitri 1446H to all who are celebrating this joyous occasion. May this festive season bring you peace, happiness, and meaningful moments with your family and loved ones. As we gather to strengthen our bonds and share in the spirit of togetherness, let us also reflect on the blessings of Ramadan and the values of gratitude, patience, and kindness it has instilled in us.

May all our prayers, fasting, and good deeds during the holy month be accepted by Allah S.W.T., and may He grant us continuous guidance, health, and prosperity. Wishing you a safe and blessed celebration filled with love, joy, and countless beautiful memories. Eid Mubarak!



KELAB KELUARGA FKA (KKFKA)

Kelab Keluarga Fakulti Kejuruteraan Awam (KKFKA) is the pioneer family club of the Faculty of Civil Engineering (FKA), dedicated to fostering a strong sense of community among its members. KK FKA organizes a variety of events, including sports, welfare, religious, and cultural activities, bringing together FKA staff and their families. The club also hosts special programs involving FKA alumni, strengthening ties across generations.

If you would like to support the growth and improvement of KK FKA, you can contribute by scanning the QR code provided. Your generosity will help us continue building a connected and vibrant FKA family.



KKFKA TEAM

“Do not show lethargy or negligence in giving alms and charity till your last breath.” -Muhammad, upon him be peace (Bukhari and Muslim).



From left: Ir. Ts. Dr. Mohd Hilmy Naim bin Mohd Yakin, Encik Salimi bin Ismail, Dr. Nurul Syahira binti Mohammad Harmay, Dr. Siti Nur Fatimah binti Moideen, Dr. Khairun Nissa Binti Mat Said, AP Ts. Dr. Mariyana Aida Ab Kadir, Dr. Hanis Hazirah binti Arifin, Puan Kuntum binti Md. Ariff, Dr. Nor Fazlin binti Zamri, Ts. Dr. Muhamad Zulhasif bin Mokhtar & Encik Noranizam bin Demin

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