

ActuaRead

A Newsletter by Malaysian Actuarial Student Association



Official Graduate Career Partner:



Affiliated Actuarial Societies:



About Us

Founded in October 2018, the Malaysian Actuarial Student Association (MASA) has been actively developing actuarial science students' potential in Malaysia and empowering them to be the next generation of actuarial leaders. As of December 2021, MASA has gathered over 550 members from both public and private universities nationwide. MASA has also affiliated with actuarial societies from 10 universities in Malaysia.

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How Cryptocurrency Impacts the Environment

“Cryptocurrency develops with the revolution of blockchain technology— enforcing decentralization, providing credibility to the list of records stored inside the blocks and spreading the encrypted data across multiple networks.”

The cryptocurrency scene has taken the world by storm. Started in 2009, the first-ever cryptocurrency was created by Satoshi Nakamoto called the Bitcoin. According to the Bitcoin white paper, the purpose of this digital currency is to create a decentralised transaction system that relies on a peer-to-peer operation; in other words, it relies on the users within the network itself to validate transactions. Given the idea of decentralisation, Bitcoin has gained popularity. Following that of Bitcoin, many other cryptocurrencies have also slowly emerged from the water.

Cryptocurrency develops with the revolution of blockchain technology, which is mainly used for enforcing decentralization, providing credibility to the list of records stored inside the blocks and spreading the encrypted data across multiple networks. Miners, who are the main people involved, perform all work associated with validating and processing every transaction in the chain via a transaction verification process, blockchain mining. A proof-of-work (PoW) consensus protocol has been put into place in publishing new blocks in the public blockchain ledger. Based on Satoshi Nakamoto, it takes about 10 minutes to mine each block. The difficulty of mining Bitcoin will change over time as more and more computers join in and more cryptocurrencies such as bitcoin are being mined. Therefore, there are different types of mining methods that come in place which include individual mining, pool mining and cloud mining to increase their cumulative computing power. Blockchain technology is the main driver of the adverse environmental factor.

Mining, maintaining and developing the blockchain requires a large amount of computational power which in turn requires energy and electricity to run. The electrical power is then obtained from energy sources such as coal, which is infamous for its negative effects on the environment. The Proof-of-Work (POW) mechanism, used by very popular cryptocurrencies, namely Bitcoin (BTC) and Ethereum (ETH) consumes the most amount of energy compared to other mechanisms such as Proof-of-Stake (POS). Furthermore, a large demand for cryptocurrencies would in turn cause a higher frequency in mining activities, thus causing more harm to the environment.

According to Digiconomist, annually, BTC has a carbon footprint of 60.16 MtCO₂ (similar to the carbon footprint of Morocco) with an amount of 9.55 kT of electronic waste (similar to waste produced by Luxembourg). For one BTC transaction, the carbon footprint sums up to 745.95 kgCO₂ with an amount of 118.40 g of electronic waste.

How Cryptocurrency Impacts the Environment

Next, we look at the carbon footprints left by another popular cryptocurrency, ETH. According to Digiconomist's Ethereum Energy Consumption Index, the whole ETH network has a carbon footprint of 23.88 MtCO₂ which is comparable to Sri Lanka's carbon footprint. One single ETH transaction contributes to a carbon footprint of 51.6 kgCO₂. This carbon footprint is equal to watching YouTube for 8600 hours or 114,363 VISA transactions.

In order to understand the awareness of citizens on cryptocurrency issues, a total of 110 responses were collected from Malaysian students who are between 18 and 29 years old on a survey regarding cryptocurrency trading and its impact on the environment. The result indicates that there is a lack of awareness or knowledge regarding cryptocurrency trading and thus also its impact on the environment among Malaysian students. We will discuss further people's perceptions on cryptocurrency and the challenges they met to switch to a more sustainable cryptocurrency alternative. Different populations might have different priorities that may or may not conflict with the environmental objective. To maximise profits, cryptocurrency miners also seek low-cost electricity and permissive policy locations, which would create environmental hazards and impact local consumers without producing any benefit for communities. Besides, most of the corporations and traders might neglect the negative impact that they caused on the environment as it is conflicting with their profit priority.

Due to the tragedy of the commons, miners and investors of Bitcoin have no incentive to stop, as detaching completely from cryptocurrency means that they are missing out on potential profits. The hope of the future in cryptocurrency is to shift the users to third-generation cryptocurrencies that are more sustainable and greener rather than completely isolating them from it. Third-generation cryptocurrencies are the latest category of cryptocurrency that uses various types of non-blockchain proofing system, such as Tangle and Proof-of-space-and-time, which solves the main problems of scalability and sustainability that comes with traditional cryptocurrencies. With these new and improved proofing systems, the speed and amount of which transactions can be made have increased by a significant number, meanwhile using far less electrical resources and completely banished the concept of "miners". Notable third-generation cryptocurrencies include Ripple, IOTA, Chia, Cardano, Stella and many more.

Authors: Chaw Jia Lun, Ng Chee Yan, Wong Ven Vai, Ying Hwan Ni

Supervisor: Lim Jia Zheng

Reference :



linktr.ee/acturead.masa

Which part of the sharing session interests you the most?

Each session is always an opportunity to learn something new & it is what interests me the most. Learning new skills such as Excel VBA by implementing it in a mini-project as well as presenting a topic that was not taught in the university gives a sense of motivation and achievement. I got to apply the hard skills to real data, understand the concepts of some actuarial terms used in the industry and how it would help the company once certain values are known. This also brought an opportunity for me to ask my mentor for clarification on the skills or terms we've learnt and why we do what we do while also learning from other mentees as they have their perspectives along with the sessions.

How likely will you recommend to your friends/juniors for this programme?

Very likely! This is an opportunity to learn from people in the industry who are about our age group, which makes it relatively easier to communicate with each other. Whether one is studying, on a break or having an internship/part-time, being part of this programme will definitely benefit them in the sense that you can seek advice from the mentors and fellow mentees. It is also a platform to grow by learning something new, whether hard skills, soft skills or even just hearing from different people's experiences to widen our horizon while also building connections with new friends. So, to those who have yet to join this programme, don't hesitate! Regardless of whether you are a first-year or final year, there's something to learn from the mentors and mentees joining this programme.

CHAN EE YANG



I strongly believe that every experience will give us unique learnings and experiences regardless of their nature. It could be profession related like internships or apprenticeships, student-based activities like clubs and societies or it could be activities that are not related to your professions like volunteering or part-time jobs. As long as you put in all your effort and trust the process while constantly taking some time to reflect on your development, every experience you had will be a useful and meaningful experience.

It is my honour to be one of the recipients of MAYS as this is a sign of recognition for me, not just for my academic performance but more importantly the overall effort that I put in. Looking back on the journey that I had, it is bumpy. I had numerous failed interviews and applications but I appreciate every single failed attempt as these are reasons that made me grow. Failure is not the opposite of success but in fact, it is part of it, so it is crucial to embrace failures and gain your learnings from there.

Everyone is a star that deserves the chance to shine and to be seen. If you are confident, resilient and brave to take up challenges, your day to shine will not be far away. Thank you.

WONG VEN VAI



From preparing for my application to receiving the MAYS Special Award, this whole journey was a great learning experience for me. Writing an executive summary to share my ideas and thoughts about the Malaysian insurance industry has increased my knowledge about this industry and I am excited to see what is next to come. Being able to help pay for my university fees with my effort through this scholarship instilled my confidence in being independent. This scholarship reminded me to always continue to strive and to put effort into my work, no matter which stage in life I am currently at.

This scholarship has also inspired me to always give back to the community and to lend a helping hand to others in need. This scholarship has assisted me in many ways, so I would like to thank everyone involved in the process of making this possible. Thank you to Mr. Tan Suee Chieh, Mr Charchit Agrawal and Nicholas Actuarial Solutions for the kind sponsorship. Your generosity is very much appreciated as it has helped me in achieving my goals and dreams. Thank you to my interviewers, Mr. Lim Horng Cherg and Mr. Tony Tan Chee Yew for the advice and for selecting me as a scholar. Thank you to the MASA committee members for organising this event and giving me this opportunity to become a MAYS Special Award holder. Congratulations to all the scholars and applicants!

Malaysian Actuarial Youth Scholarship (MAYS) 2021

— Ordinary Awards Holders —

JOSHUA TAN TZE CHONG



I am truly honoured to be selected as one of the recipients of the Malaysian Actuarial Youth Scholarship Ordinary Award, and congratulation to the other recipients of both the MAYS Special and Ordinary Awards.

I would like to take this opportunity to express my gratitude to MASA for establishing this scholarship and continuing to support the actuarial student community in Malaysia even during these difficult times. I would like to express my sincere appreciation to all the MAYS Ordinary Award donors, Mr Charchit Agrawal, Nicholas Actuarial Solutions and an anonymous donor, for contributing to the actuarial student community. I would also like to give a special thanks to Mr Tan Suee Chieh, which I had a chance to speak to via Zoom call. Although a short call, Mr Tan provided a lot of insight into the actuarial field by talking about how he was back when he was a student, and how he started his career. He also gave me a lot of advice for my studies and also my future career. I hope that one day, I will be able to give back to the actuarial student community as well.

Last but not least, I would like to thank my friends and family. I am so appreciative to have the loyal, supportive, and caring family and friends that I do. I could not imagine what I would do without them, and I would like to thank them for continuing to support me throughout my education. I wish everyone reading this all the best with your studies, take care of yourselves and stay safe!

CHONG SHIN WEI



I am honoured and beyond grateful to be selected as the recipient of the Malaysian Youth Actuarial Scholarship (MAYS) Ordinary Award. Receiving this scholarship has motivated me to persevere and pursue my actuarial career. Hence, I would like to express my deepest gratitude to MASA and the donors of this scholarship, Mr Tan Suee Chieh, Mr Charchit Agrawal and Nicholas Actuarial Solutions. I would also like to thank Mr Tan for his encouraging words. I've gained indispensable insight from his sharing and hope to be able to contribute to society in the future.

Listen to the EXCO of the year!

WONG QI JIE

President



With the ongoing pandemic that is far from ending, we constantly had to change and adapt to the situations we are forced into. Versatility has come to play in almost every situation for me in the past year, and it has allowed my team and I to overcome every obstacle in our way.

However, my time in MASA was not only about versatility. I have been given a new responsibility to serve and lead the actuarial community, and that was no easy task. I was required to put aside my personal interest and make rational decisions for the benefit of everyone. Even with my experience as a committee member in HWUMSAS, I constantly struggled, made mistakes and doubted myself for lacking the skills and experience I needed.

Perhaps the only thing that was preventing me from breaking down throughout the year was the people I was working with. Without me realizing it, I grew fond of these strangers who share the same dreams as me. Because of the impact we were able to bring together, these people became the reason I want to continue serving the community, and give everyone a better future. My only departing wish is that there will always be young talents who will step up and bring our community to greater heights.

WEI JIA XIN

Vice President of Finance



I embarked on the journey as the Vice President of Finance with MASA Executive Committee virtually through a Microsoft Teams meeting last December. It seems to be ending this way too, unfortunately. However, amidst the difficulties to meet physically, we managed to pull off a brilliant year for MASA together as a team under the lead of Qi Jie, our president.

MASA was a great platform for personal growth and self-improvement as I take on responsibilities and have commitments to fulfil. Being equipped with soft skill are equally, if not more, as important as scoring flying colours in our examinations. Here, it was the perfect training ground before I really set foot in the industry. I am also very thankful for the new opportunities to learn and meet people from different backgrounds, being both actuarial students and working professionals.

Nevertheless, I have gained not only knowledge and skills, but friends that would go a long way. The year with MASA EXCO 2021 passed by in the blink of an eye, and I did not regret it one bit. With confidence and high hopes, I look forward to see the next team leading MASA soar to greater heights.

Listen to the EXCO of the year!

MATTHEW PHILIPPE LIU MAN HIN



Vice President of Internal Affairs



Joining MASA as the Vice President of Internal Affairs will be a decision I never regret. Throughout this 1-year journey, not only did I get to learn certain technical skills and organizational skills, but I also manage to connect with other wonderful personalities in the EXCO team, executive team and event committee team. Being in MASA has allowed me to grow and develop myself to become a better person.

I still remember when I receive the successful email, I was nervous as I had to work with a group of new individuals. However, we manage to work well with one another in the first few months and I cannot imagine how it would be without them. Each of them is very capable in their own field and to get to know each of them is truly an honour.

To all future actuarial students, take this opportunity to develop yourself and network more. In MASA, I was given the opportunity to network with professionals as well as peers from other universities and I am forever thankful for this.

YEONG D-KAI



Vice President of Communications



In the blink of an eye, my journey in MASA that started two years ago has finally reached its shore. It was a sense of curiosity and audacity that got me into MASA, and I'm glad to have made the decision back then.

2021 was never meant to be easy amid the ongoing COVID-19 crisis. However, it was those little moments of awkward, joy, or even madness that shaped up the togetherness and teamwork around all the EXCOs, which made the journey even more entertaining. Also, a big thanks to all the executives of Communication team and the event committees for being supportive, innovative, and enthusiastic in promoting all the events and initiatives of MASA. Thanks to them, we're able to reach out to more students via our social media and provide them a platform to learn and gain knowledge to pursue their dreams.

The journey wasn't all smooth sailing, but they've played an integral part in clearing the obstacles away, and I'm extremely grateful for that. I'm sure that MASA will continue to serve and unite the actuarial student community, and to impact through unity.

Listen to the EXCO of the year!

LIEW SOON YEE



Vice President
of Operations



If I were to describe MASA in three words, it would be inclusive, motivating and professional. Being part of this inclusive and motivating team with a group of like-minded people, MASA provides a platform for me to enhance my personal and professional development.

Starting from being an event committee in 2020 and moving to the position of the Vice President of Operations in 2021, I could not be more grateful for the experiences I have gained from this two-year journey. With countless leadership, learning and networking opportunities available, MASA has encouraged me to strive for continuous improvement, and shaped me into who I am today.

“12” might not sound like a large number, but the successful execution of 12 events in a year requires plenty of hard work, cooperation and support. My utmost appreciation to all my talented and supportive teammates in MASA, for the fun moments and promising achievements we had throughout this challenging yet fruitful year!

TAN JIE SHEN



Assistant Vice
President of
Operations



It was a thrilling and fantastic journey in MASA since I first joined in 2020. Thanks to MASA for giving me these opportunities to learn new skills and expand my network.

2021 has been a challenging year while the pandemic is yet to be settled. Nevertheless, our team adapted swiftly to the changes since last year, shifting all the events to virtual mode. We are truly glad that the events were successfully executed and brought benefits to the members.

Being able to contribute to the actuarial student community has always been my aspiration as an undergraduate, and I believe I have achieved my goal. Undoubtedly, without the effort of everyone in MASA, the events would not be a success. It's my pleasure to work and learn together with supportive and capable peers from different universities.

Looking forward to seeing a more robust actuarial student community in the future. Impact through unity. Cheers!

Listen to the EXCO of the year!

LEE CHERN YEE

Vice President of
Corporate Relations



It was a true honour to be elected as the VP of Corporate Relations at MASA in 2021 after joining the Corporate Relations Team as an Executive in 2020. This year, we have successfully launched 3 scholarship initiatives with 10 scholars and expanded our connections with various organisations, bringing the membership value to a higher level.

MASA has provided a great learning opportunity for me. Seeing how decisions are made, information is shared, crises and triumphs are managed — these are all tremendous learning opportunities that have enhanced me comprehensively. If you are on the fence about joining MASA, believe me, you will be rewarded. On top of that, leadership positions offer even more opportunities if you allow your beliefs and ideas to be challenged and open your mind to change.

Nothing can be accomplished without great support. Thank you to all who gave a hand in support of the growth of MASA, and special thanks to every committee who worked tirelessly in contributing to the growth of MASA. I wish you all continued success.

TEO WEN CHING

Assistant Vice
President of
Corporate Relations



As the AVP of Corporate Relations, also as part of the MASA EXCO 2021, it is very fortunate for me to meet fantastic teammates from different universities in Malaysia, everyone is capable in their own field and this makes things go very smoothly.

Recalling my journey of joining MASA in 2020 as an executive of Corporate Relations, I guess the only sad thing would be us unable to hold physical events and meetups due to the sudden pandemic. However, I am still grateful for being able to meet and know amazing professionals, peers, seniors as well as juniors throughout the two-year journey. This year, the Corporate Relations team has established a few scholarships, expanded MASA's connections and finally came to the last volume of the ActuaRead newsletter.

Hereby I would like to express my utmost appreciation to my partner, Chern Yee and of course Mark, Fatehah and Shihui, the executives of the Corporate Relations department this year, we couldn't have gone this far without your dedication. Lastly, I wish all of the EXCO's and executives the best of luck in their respective future careers, stay safe!

Data Analysis: Questionnaire Workshop

Actuarial Student Club of USIM (ASC)

Data Analysis: Questionnaire Workshop

SAVE THE DATE!

Date: 4th September 2021,
Saturday
Time: 8.30 am - 12.30 pm
Medium: MsTeams

Register here

Prof. Madya Dr. Nurul Sima binti Mohamad Shariff,
Faculty of Science and Technology, USIM

**DATA ANALYSIS
questionnaire**

@asc.usim | @financialmathsociety

On 4th September 2021, **Actuarial Student Club of USIM (ASC)** organised a virtual event along with Financial Mathematics Society of USIM. The event was held in Microsoft Teams. The seminar was created specifically for final year students or students that are doing a questionnaire thesis in Actuarial Science or Financial Mathematics field. The talk was given by their Senior Lecturer in Faculty Science and Technology, Prof. Madya Dr Nurul Sima binti Mohamad Sharif. The number of participants was 100 students from our university.

Past Events from
Affiliated Societies

A Dip into Microsoft Excel

Actuarial Science Student Association (ASSA)

ASSA EXCELOpedia 2021

**ASSA
EXCELOPEDIA
2021**

NOVEMBER 27, 2021 (SATURDAY)
2.00PM - 4.30PM (GMT+8)
MICROSOFT TEAMS
RM 5 (REFUNDABLE FOR ASSA MEMBERS)

Speaker: Mr. Gabriel Ryan
Financial Risk Manager (FRM)
Standard Chartered Bank Singapore

SCAN HERE
TO REGISTER!

For more information, please contact:
Wei Sheng at weisheng.assa@gmail.com
Sin Hui at sinhui.assa@gmail.com

Organized by ASSA
Supported by UCSI, SAA, and other sponsors.

On 27th November 2021, **Actuarial Science Student Association (ASSA)** successfully organized a workshop titled "ASSA EXCELOpedia 2021". The invited speaker, Mr. Gabriel Ryan is currently the Data Strategy Manager under the Risk, Compliance and Finance division of Standard Chartered Bank based in Singapore. During the workshop, Mr Gabriel shared his depth understanding of Microsoft Excel. To provide a better understanding to students, he also explained the basic and commonly used functions in Microsoft Excel. He also prepared simulation exercises for students to work around during the workshop. The event ended with a QnA session.

AmplifyME's Finance Accelerator Global Markets Simulation

SUNWAY UNIVERSITY **SUNWAY COLLEGE**
A CLASS ABOVE **Leading in Education**

AMPLIFYME
FINANCE ACCELERATOR SIMULATION

13th November 2021 (Saturday)
2:00 p.m. - 4:00 p.m.
Zoom.us

Scan to register

SALES & TRADING
Make markets, build relationships & generate commissions to become the top investment bank.

ASSET MANAGEMENT
Execute your best investment ideas, react to breaking news and maximize your profit.

PERFORMANCE DATA
Gain role specific skills, develop your edge and leverage your performance data to get ahead.

Owned and governed by the
Jeffrey Cheah Foundation
Nurturing the Seeds of Wisdom

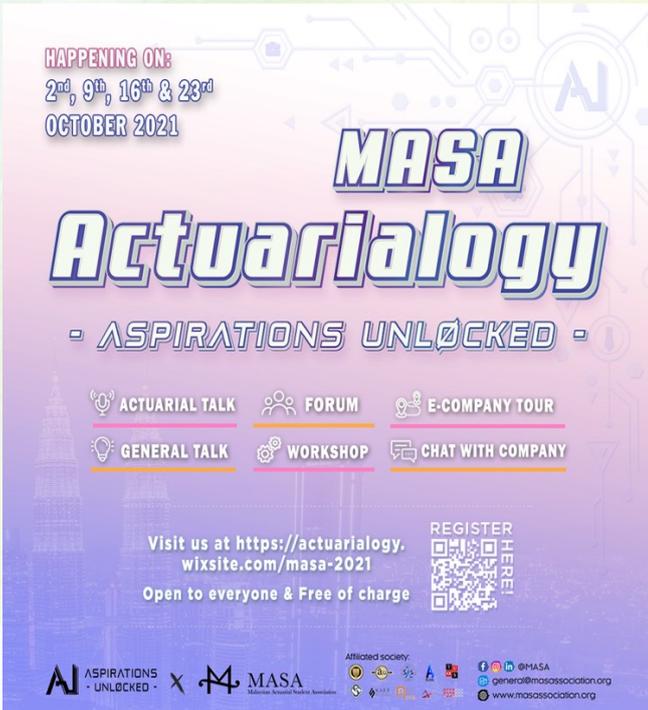
S.A.F.E. **SUNWAY UNIVERSITY** **SUNWAY COLLEGE**

Sunway Actuarial & Financial Excellence (SAFE)

is glad to announce their continued partnership with AmplifyME. On the 13th of November 2021, the yearly Finance Accelerator simulation was held via Zoom. The event aimed to provide real practical experience as a market maker, sales trader and also asset manager. The simulation was separated into two parts, where the participants were given 45 minutes each to take on both the buy-side and sell-side. All participants experienced both market-making and sales trading for an investment bank and also served as a portfolio manager for an asset management firm with positions in equities such as Alibaba (BABA), HSBC, British Petroleum (BP), Microsoft (MSFT) and Volkswagen (VW).

After the simulation, participants also received their performance metrics to help them understand their aptitude in their respective roles during the simulation. In conclusion, the participants have gained some essential knowledge in Sales & Trading and Asset Management.

Hear from our Event Participants!



HAPPENING ON:
2nd, 9th, 16th & 23rd
OCTOBER 2021

MASA Actuarialogy

- ASPIRATIONS UNLOCKED -

ACTUARIAL TALK | FORUM | E-COMPANY TOUR
GENERAL TALK | WORKSHOP | CHAT WITH COMPANY

Visit us at <https://actuarialogy.wixsite.com/masa-2021>
Open to everyone & Free of charge

REGISTER HERE!

ASPIRATIONS UNLOCKED x MASA
Malaysian Actuarial Student Association

Affiliated society:
@MASA
general@masassociation.org
www.masassociation.org



MASA Networking with ASM: Connections Unite

Join us to connect with experienced actuarial professionals and interact with young talented actuarial students!

- 11th December 2021, Saturday (MYT)
- 2.30pm-4.30pm (MYT)
- Microsoft Teams

Members: Free
Non-members: RM10

Collaboration with:
Actuarial Society of Malaysia

Registration Deadline:
8th December 2021, 12pm (MYT)

Affiliated society:
www.masassociation.org

MASA Actuarialogy: Aspiration Unlocked

- ◆ I love how professional the organising committees are especially the time management. Event starts and ends on time.
- ◆ The moderator set up the mood of the event and the speaker was very engaging with the panellist towards every question directed to them.
- ◆ Speaker Mr Patrick was amazing! Hoping the organising committees can bring similar standards of quality, experience, and knowledgeable presenters in the actuarial industry like him in the future.

MASA Networking with ASM: Connections Unite

- ◆ The agenda is well-planned, and the flow of the event is smooth. The time is also sufficient for all the presentation and Q&A session.
- ◆ The event is informative, and it is good to keep up the standard.
- ◆ Love the sharing from the speakers and it's also great that all the questions asked were answered by the speakers.

MASA Corporate Relations

Norfatehah binti Norazman	Designer
Mark Lim Chen Yang	Content
Ooi Shihui	Content

Malaysian Actuarial Student Association

President

Wong Qi Jie	President
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Vice President

Matthew Philippe Liu Man Hin	Internal Affairs
Wei Jia Xin	Finance
Lee Chern Yee	Corporate Relations
Yeong D-Kai	Communication
Liew Soon Yee	Operations

Assistant Vice President

Teo Wen Ching	Corporate Relations
Tan Jie Shen	Operations

MASA Student Representative Council

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Tan Zi Yik	Taylor's
Rawewan A/P Bon Rit	UKM
Chiew Kai Shin	UTAR
Clemence Lai Cheng Man	UCSI
Lim Hua Ying	APU
Joey Lim Jia Yee	HWUM
Kanee Teo Jia Ying	UM
Nur Amalia Badrina binti Meor Amirudin Fikri	UiTM

Send us your feedback!

We are concerned about your expectation. Feel free to contribute by submitting articles to us.



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Interested in becoming part of us? Wish to stay connected? Scan the QR code for more info!



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Stay connected with us!



More enquiries, drop us an email at general@masassociation.org

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Affiliated Actuarial Societies:

