

# ICEEA 2022, MYANMAR 16<sup>th</sup> & 17<sup>th</sup> JULY

## **International Conference on Engineering Education Accreditation**

Theme: "Quality Engineering Education Towards Engineering the Future"





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#### **International Conference Message**

"Dear Colleagues and Stakeholders in the Field!

On behalf of the International Conference Organizing Committee, I am very delighted to welcome you to the International Conference on Engineering Education Accreditation (ICEEA 2022 Myanmar) held on  $16^{th}$  and  $17^{th}$  July, 2022.

As the global pandemic continues to shift dynamically, we have eventually decided to change the originally planned face-to-face conference to the hybrid conference, in order to make a successful and safe event for all conference participants.

The Conference deliberations would be on the theme "Quality Engineering Education Towards Engineering the Future".

With Quality Education, engineering students and engineers will innovate new technologies and apply sustainable development concepts and knowledge in expanding new engineering workplaces and disciplines.

In Myanmar, Myanmar Engineering Council has started to introduce Outcome-based engineering education with support from Engineering Organizations/Institutions as IEA, WFEO, FEIAP and others around the world.

Towards a Quality Engineering Education, ICEEA 2022 is intended to provide a scenario for the interactions among the professionals and experts from world reputed organizations to achieve the quality engineering education and accreditation.

The conference will have the honorable speakers who will share the innovative ideas regarding the future engineering, accelerate the plans in the post-COVID period, set goal for the sustainable development around the world, and much more.

I sincerely thank you for taking part in this valuable conference as speakers or as participants."



Prof. Dr. Charlie Than

Patron

**Myanmar Engineering Council** 



Prof. Dr. Aung Kyaw Myat

President

**Myanmar Engineering Council** 

"Excellences, Comrade Engineers, Ladies and Gentlemen,

Myanmar Engineering Council (MEngC) and its associated body Engineering Education Accreditation Committee (EEAC) are trying hard to promote the standards of Engineering Education in Myanmar by the accreditation process according to the Accords [Washington Accord (W.A), Dublin Accord (D.A) and Sydney Accord (S.A)] and the process went smoothly during the years 2019 and 2020.

The engineering institutions of the world recognize the critical need for more engineers with the skills that are required for modern industry and to advance the UN Sustainable Development Goals. Engineers are needed in increased numbers for the growth and development of essential infrastructure such as roads, railways bridges, dams and for improved outcomes on water, energy, environment, sustainable cities, natural disaster resilience and other areas.

Therefore the producing of talented engineers in Myanmar has been also followed the path mention in the above statement. So keep all the criteria need to be implemented in our mind, (MEngC) and (EEAC) will do the best to reach the sustainable goals of UN as well as the goals of MEngC Strategic Plan 2018-2030.

I firmly believed that this International Conference will help us to receive the full signatory of Washington Accord and it will enhance the task of accreditation processes in Myanmar. Last but not the least, appreciations and gratitude go to all the stakeholders for establishing this International Conference successfully.

Thank you very much for participation in this auspicious conference."

#### About International Conference

Myanmar Engineering Council & WFEO-CEIE are holding an International Conference on Engineering Education Accreditation (ICEEA 2022) virtually on July 16<sup>th</sup> and 17<sup>th</sup> 2022, from 12:30 hr. to 17:00 hr (MMT: UTC+6:30). The Conference deliberations would be on the theme "Quality Engineering Education Towards Engineering the Future".

*ICEEA 2022* is intended to provide a scenario for the interactions among the professionals and experts from world reputed organizations to achieve the quality engineering education and accreditation. The conference will have the honorable speakers who will share the innovative ideas regarding the future engineering, accelerate the plans in the post-COVID period, set goal for the sustainable development around the world, and much more.

*ICEEA 2022* has been launched and designated for the purpose of deliberating on quality assurance systems, accreditation system, and the best practice in international and local engineering education.

ICEEA 2022 Plenary Speakers: International and Myanmar Engineering Education and Practice Leaders, Engineering Professionals from Ministry of Industry, the Washington Accord of International Engineering Alliance (IEA), the World Federation of Engineering Organizations (WFEO), the Federation of Engineering Institutions of Asia and the Pacific (FEIAP), Engineers Australia (EA), China Association for Science and Technology (CAST), the Institute of Engineering Education Taiwan (IEET), Board of Engineers Malaysia (BEM), Pakistan Engineering Council (PEC), Institute of Engineers Malaysia (IEM), Institute of Engineers Singapore (IES), Philippine Technological Council (PTC) among other higher education institutions in the country.

## Speakers & Topics

Em Prof. Elizabeth Taylor	Engineering education and accreditation focus on a better future for all		
Dr. Marlene Kanga	Transforming Engineering Education for Sustainable Development:		
	From Vision to Actions with Impact		
Er. Tan Seng Chung	The impact of sustainability in engineering education		
Professor Liang-Jenq Leu	IEET Action Plan Towards Meeting the IEA GAPC New Standards		
Academician Tan Sri Dato' Ir.Prof.	Cultural Intelligence in Engineering Education		
Dr.Chuah Hean Teik			
Engr. Federico A MONSADA	Plenary Presentation		
Dr. Peggy Oti-Boateng	Transforming Engineering Education for Sustainable Development		
Engr. Refilwe Buthelezi	Industry and Academia Collaboration to Empower Engineering Education		
Prof. Dr. Sanjay Agrawal	OBE - Need for Quality engineering Education		
Ir. Hasril Hasini	Addressing Complex Engineering Problem for Design- and Project-Based Courses		
Engr. DiplIng. Myint Oo	A Study on Becoming Full Signatory of Washington Accord for a Statutory		
	and Regulatory Body such as Myanmar Engineering Council (MEngC)		
	through Quality Engineering Education towards Engineering the Future		
Prof. Kai Sang LOCK	Future-Proof Engineering Education		
Dr. Michael Milligan	Making an Impact		
	Partnering with Industry and Workforce Development		
Dr. Lincoln A Wood	Assurance of the Profession of Engineering		
	The Context for Accreditation		
Dr. Mandy Liu	The Sydney Accord, an Introduction		
Ir Tan Yean Chin	Registration and Development of Engineering Personnel via FEIAP & Africa, Asia and		
	the Pacific Accord (AAP Accord)		
Prof. Shan-Tung Tu	Green engineering education underpinning green development		
Dr. Ei Ei Khin	Analysis of QMS During Covid-19 Pandemic		
Dr. Nilar Aye	Review on Assessment of Final Year Project Performance in Civil Engineering		
Dr. Htay Htay Win	Implementation and Assessment Methods of OBE in Engineering Education		
Dr. Wanna Swe	Analysis of Course Outcomes in Electrical Power Engineering Curriculum using		
	Illustrative Verbs derived from Bloom's Taxonomy		
Dr. San Yu Khaing	Achievement and Challenges Encountered during the Implementation of Quality		
	Management System and Accreditation in Mandalay Technological University		
Dr. Tin Tin Hla	Curriculum Benchmarking towards the Quality of Electronic Programs		
Daw Sandi April Maung	Risk Analysis and Management on Engineering Education of Technological Universities		
	in Myanmar during COVID-19 Pandemic		
Daw Yin Yin Mya	Future Pathways in Engineering Education and Research for Engineers		
Dr. Thaw Tun Ko	Development of Nuclear Engineering Curriculum in Mandalay Technological University		

## Programme Agenda

Date	Time (MMT)	Activity	Speaker		
	12:20 ~ 12:40 (20mins ~ 25mins)	Opening Announcement			
		Opening Address	Prof. Dr. Charlie Than, Patron, Myanmar Engineering Council		
	12:40 ~ 12:50 (10mins)	Opening Address	Prof. José VIEIRA, President, World Federation of Engineering Organizations (WFEO)		
	12:50 ~ 13:10 (20mins ~ 25mins)	Keynote Presentation	Em Prof. Elizabeth Taylor, Chair, Washington Accord Executive Committee, International Engineering Alliance (IEA)		
	13:10 ~ 13:30 (20mins ~ 25mins)	Keynote Presentation	Dr. Marlene Kanga, Past President, World Federation of Engineering Organizations (WFEO)		
	13:30 ~ 13:55 (25mins ~ 30mins)	Keynote Presentation	Er. Tan Seng Chung, Vice President, The World Federation of Engineering Organizations (WFEO)		
	13:55 ~ 14:20 (25mins ~ 30mins)	Keynote Presentation	Professor Liang-Jenq Leu, CEO, Institute of Engineering Education Taiwan (IEET)		
	14:20 ~ 14:40 (20mins)	Forum/ Reaction	Wrap-up Session by Host for the Day & Q & A by MC		
	14:40 ~ 14:45 (5mins)	Health Break			
16 <sup>th</sup> July	14:45 ~ 15:10 (25mins ~ 25mins)	Keynote/ Plenary Presentation-1	Academician Tan Sri Dato' Ir.Prof. Dr. Chuah Hean Teik, Chairman, Standing Committee on Engineering Education, FEIAP		
2022 (Saturday)	15:10 ~ 15:35 (20mins ~ 25mins)	Keynote/ Plenary Presentation-2	Engr. Federico A MONSADA, President, Philippine Technological Council (PTC)		
	15:35 ~ 15:55 (20mins ~ 25mins)	Keynote/ Plenary Presentation-3	Dr. Peggy Oti-Boateng, Senior Science Advisor for Natural Sciences/ Former Director of Division of Science Policy and Capacity Building, UNESCO HQ. Paris, France		
	15:55 ~ 16:15 (20mins ~ 25mins)	Keynote / Plenary Presentation-4	Engr. Refilwe Buthelezi, President, The Engineering Council of South Africa (ECSA)		
	16:15 ~ 16:35 (20mins ~ 25mins)	Keynote / Plenary Presentation-5	Prof. Dr. Sanjay Agrawal, National Board of Accreditation (NBA, India), Professor, National Institute of Technical Teachers' Training & Research, Bhopal		
	16:35 ~ 16:55 (20mins ~ 25mins)	Keynote / Plenary Presentation-6	Assoc. Prof. Ir. Dr. Hasril Hasini, Associate Director, Engineering Accreditation Department, Engineering Accreditation Council, BEM		
	16:55 ~ 17:15 (20mins ~ 25mins)	Keynote / Plenary Presentation-7	Engr. DiplIng. Myint Oo, Vice President-1, Myanmar Engineering Council		
	17:15 ~ 17:35 (20mins)	Forum/ Reaction	Wrap-up Session by Host for the Day & Q & A by MC		
	MC: Dr. Thwe Thwe Win, Daw Thiri Kyaw, Daw Khine Zar Thu				
	Host For the Day: Dr. Kyi Soe, Engr. Htoon Htoon Oo, Dr. May Myat Khine, Dr. Shwe Wut Hmon Aye, Dr. Naw Khu Say Wah, Dr. Thet Paing Phyo, Dr. Su Su Myat Mon, Dr. War War Lwin, Dr. Wai Phyo Aung				

Date	Time (MMT)	Activity	Speaker		
	12:30 ~ 12:50 (20mins ~ 25 mins)	Opening Address	Prof. Dr. Aung Kyaw Myat, President, Myanmar Engineering Council		
	12:50 ~ 13:10 (20mins ~ 25 mins)	Keynote Presentation	Prof. Kai Sang LOCK, Deputy Chair, Washington Accord, International Engineering Alliance (IEA) Emeritus President, The Institution of Engineers Singapore		
	13:10 ~ 13:30 (20mins ~ 25 mins)	Keynote/ Plenary Presentation-8	Dr. Michael Milligan, Executive Director, CEO, Accreditation Board of Engineering and Technology Inc., (ABET)		
	13:30 ~ 13:55 (25mins ~ 30 mins)	Keynote/ Plenary Presentation-9	Dr. Lincoln A Wood, Engineers Australia		
	13:55 ~ 14:20 (25mins ~ 30mins)	Keynote/ Plenary Presentation-10	Dr. Mandy Liu, Office Director and Deputy Executive Director of the Accreditation Council, Institute of Engineering Education Taiwan (IEET)		
	14:20 ~ 14:40 (20mins ~ 25 mins)	Keynote/ Plenary Presentation-11	Ir Tan Yean Chin, Secretary General, Federation of Engineering Institutions of Asia and the Pacific (FEIAP)		
	14:40 ~ 15:00 (20mins ~ 25 mins)	Keynote/ Plenary Presentation-12	Prof. Shan-Tung Tu, East China University of Science and Technology, China		
	15:00 ~ 15:15 (15mins)	Forum/ Reaction	Wrap-up Session by Host for the Day & Q & A by MC		
	15:15 ~ 15:20 (5mins)		Health Break		
	15:20 ~ 15:30 (10mins)	Paper Presentation-1	Dr. Ei Ei Khin, Professor/ Quality Management Manager, Quality Management System Office, Yangon Technological University		
	15:30 ~ 15:40 (10mins)	Paper Presentation-2	Prof. Dr. Nilar Aye, Head, Department of Civil Engineering, Mandalay Technological University		
17 <sup>th</sup> July, 2022	15:40 ~ 15:50 (10mins)	Paper Presentation-3	Prof. Dr. Htay Htay Win, Department of Mechanical Engineering, Mandalay Technological University		
(Sunday)	15:50 ~ 16:00 (10mins)	Paper Presentation-4	Dr. Wunna Swe, Professor & Head, Department of Electrical Power Engineering, Mandalay Technological University		
	16:00 ~ 16:10 (10mins)	Paper Presentation-5	Dr. San Yu Khaing, Pro-rector, Mandalay Technological University		
	16:10 ~ 16:20 (10mins)	Paper Presentation-6	Prof. Dr. Tin Tin Hla, Professor & Head, Department of Electronic Engineering, Mandalay Technological University		
	16:20 ~ 16:30 (10mins)	Paper Presentation-7	Daw Sandi April Maung, Associate Professor, Department of Civil Engineering, Technological University (Hmawbi)		
	16:30 ~ 16:40 (10mins)	Paper Presentation-8	Daw Yin Yin Mya, Lecture, Department of Electrical Power Engineering, West Yangon Technological University		
	16:40 ~ 16:50 (10mins)	Paper Presentation-9	Dr. Thaw Tun Ko, Professor, Department of Nuclear Engineering, Mandalay Technological University		
	16:50 ~ 17:10 (20mins)	Forum/ Reaction	Wrap-up Session by Host for the Day & Q & A by MC		
	17:10 ~ 17:30 (20mins ~ 25mins)	Closing Remarks	Prof. Dr. Nyi Hla Nge, Patron, Myanmar Engineering Council		
	Photo Session & Closing Announcement				
	MC: Dr. Thwe Thwe Win, Daw Thiri Kyaw, Daw Khine Zar Thu  Heat For the Day: Dr. Kyi Soo, Dr. That Being Phys. Dr. New Khu Say Web				
	Host For the Day: Dr. Kyi Soe, Dr. Thet Paing Phyo, Dr. Naw Khu Say Wah, Dr. May Myat Khine, Dr. Shwe Wut Hmon Aye, Dr. Su Su Myat Mon,				
Dr. War War Lwin, Dr. Wai Phyo Aung					

## **Organizing Members**

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6.	Engr. Tin Latt	IR Consultant, CEIE	IR, ICEEA 2022 Myanmar
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		•	
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2.	Dr. Myint Win	EEAC, MEngC	Vice Chair, ICEEA 2022 Myanmar
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9.	Dr. Kyi Soe	EEAC, MEngC	Member, ICEEA 2022 Myanmar
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11.	Dr. Aung Kyaw Soe	EEAC, MEngC	Member, ICEEA 2022 Myanmar
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4.	Engr. Yin Htwe Thet	Experts	IR, ICEEA 2022 Myanmar