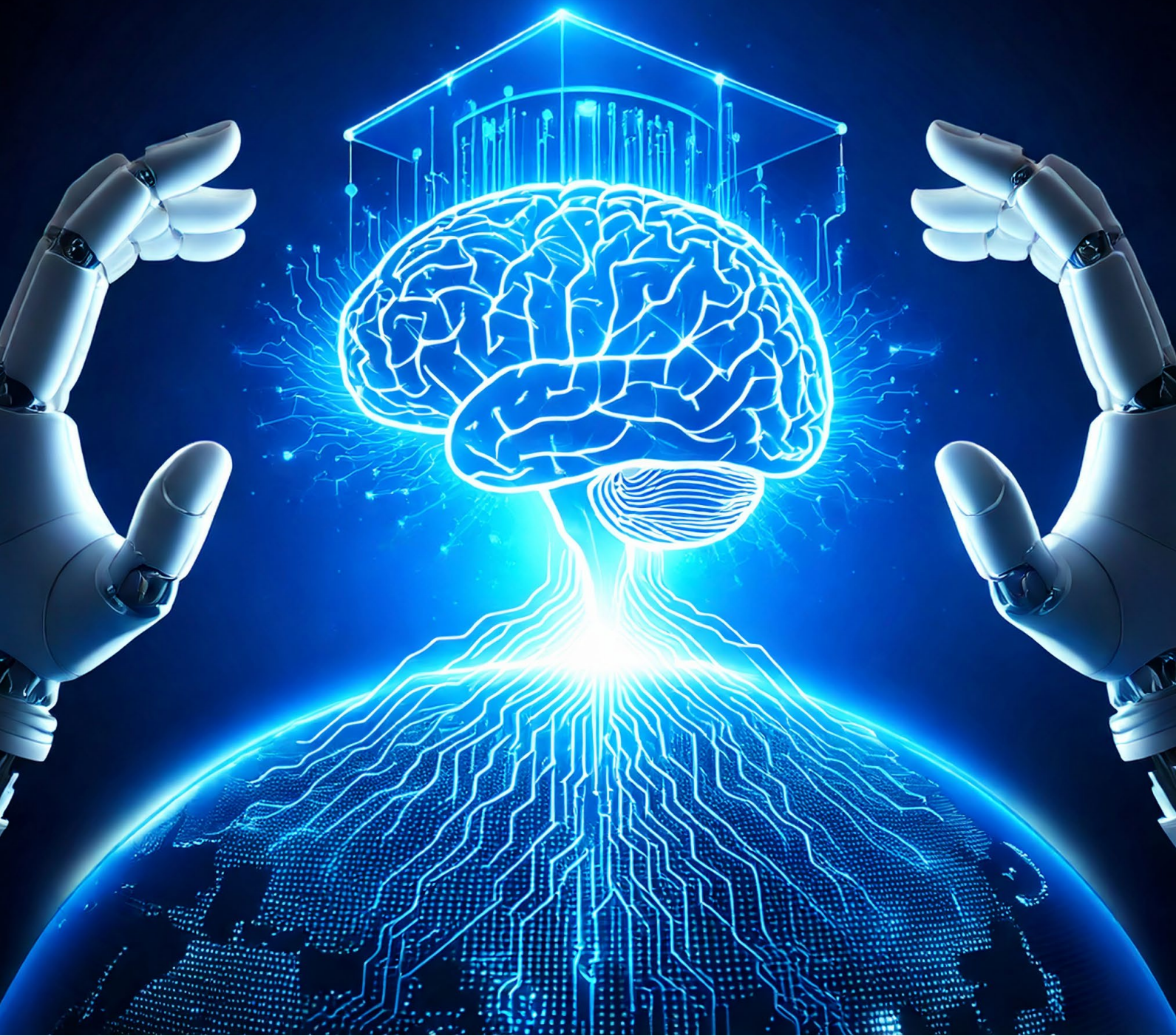




Training Programme on AI Literacy for ASEAN Primary & Secondary School Teachers

17 – 19 June 2025 | Kuala Lumpur, Malaysia



BACKGROUND

In our fast-paced world, where Artificial Intelligence (AI) is transforming how we work, communicate, and learn, education systems must adapt to prepare students for an AI-driven future. Integrating AI education into primary and secondary school curricula is a crucial step in bridging the gap between traditional teaching methods and the demands of the 21st-century workforce.

Malaysia recognizes AI and robotics as key drivers of its future economy. The National Robotics Roadmap (NRR) outlines a national strategy to increase adoption of automation, enhance AI and robotics skills, and strengthen talent development to meet Industry 4.0 demands. The roadmap envisions positioning Malaysia as a leading hub for AI and robotics in the region, with a strong emphasis on building a skilled workforce. AI education at the school level is a foundational step toward realizing this vision, ensuring that future generations are equipped with the necessary skills to contribute to Malaysia's growing AI and robotics ecosystem.

Imagine a classroom where students are not just passive recipients of knowledge but active problem-solvers, equipped with the skills to navigate and shape a world powered by AI. Traditional education methods often fall short in preparing students for this transformation, which requires more than just technical knowledge, it demands creativity, critical thinking, and ethical awareness.

The Beijing Consensus on Artificial Intelligence and Education underscores that AI should empower educators, promote inclusive and equitable learning, and ensure ethical use of technology in education. AI literacy should be a fundamental part of education systems, helping students develop both technical and ethical competencies while addressing digital divides. Similarly, UNESCO's Digital Literacy mandate highlights the need for education to equip learners with the ability to critically engage with digital technologies, ensuring that they can navigate the complexities of AI in a responsible and informed manner.

To align with Malaysia's National Robotics Roadmap, AI education must be implemented at an early stage to foster problem-solving, computational thinking, and creativity-skill essential for an AI-driven workforce. The roadmap aims to increase automation in key sectors such as manufacturing, healthcare, and agriculture, which will require a new generation of AI-literate talent. By embedding AI concepts into school curricula, Malaysia ensures that students are not just consumers of technology but future innovators and contributors to its AI-powered economy.

A well-designed AI education program should include hands-on, unplugged activities that do not require computers, allowing students to develop a deeper understanding of AI principles. These activities build foundational skills in algorithmic thinking and problem-solving, ensuring students actively engage with AI concepts rather than passively consuming technology.

ISTIC and AETDEW are committed to ensuring that developing countries are not left behind in AI education. By equipping teachers with the necessary knowledge and tools, we can create an AI-literate society that can drive technological innovation, economic growth, and job creation.

Malaysia, in particular, places great importance on AI as a driver of national development. China's global leadership in AI education - integrating AI from kindergarten through postgraduate levels has created an AI-literate society that fuels innovation. Malaysia can benefit from this experience by collaborating with China in training and nurturing AI-literate schoolteachers. Through a three-day intensive training program led by Chinese AI education experts, participants will gain a comprehensive understanding of AI's core technologies, teaching methodologies, and practical applications.

In conjunction with Malaysia's ASEAN Chairmanship 2025, this training initiative will be extended to schoolteachers across the region, fostering cross-border collaboration in AI education. By strengthening AI literacy at the foundational level, Malaysia and its ASEAN partners can support regional AI talent development, enhance workforce readiness, and contribute to the broader digital economy goals of ASEAN.

OBJECTIVES

The primary objective of AI Education is to empower students with a holistic understanding of AI, its principles, and its applications. This initiative aims to:

1. Provide primary and secondary school teachers with a comprehensive understanding of AI core technologies and their application in education.
2. Enhance teachers' knowledge and practical teaching skills in AI literacy to support the integration of AI into daily teaching.
3. Learn from China's successful AI education model, including training methods for AI-literate schoolteachers.
4. Equip teachers with the necessary teaching tools and methodologies for AI education.
5. Foster regional collaboration by engaging teachers from Malaysia and ASEAN in AI education initiatives.

EXPECTED OUTCOMES

1. Teachers will gain a solid understanding of AI core technologies and how to integrate them into their teaching.
2. Teachers will be able to design and implement AI-based teaching plans that are innovative and effective.
3. A long-term AI education learning community will be established to continuously support teachers' professional development.

DATE & VENUE

Duration: 3 days

Date: 17 – 19 June 2025 (Tuesday - Thursday)

Venue: Sri Bestari Private School, Bandar Sri Damansara, Kuala Lumpur

PARTICIPATION

About 45 participants from Malaysia, ASEAN and South countries are expected to take part in this program.

MODES OF DELIVERY

The training workshop will be conducted in English and will incorporate a blend of interactive learning methods, including:

- Lectures: Expert-led sessions offering in-depth insights into key topics.
- Demonstrations: Hands-on showcases of methodologies and technologies in AI education.
- Discussions & Presentations: Engaging discussions and participant presentations to foster knowledge sharing and collaboration.

Upon successful completion of the workshop and presentations, participants will receive an attendance certificate issued by the organizers.

To fully engage in the sessions, each participant is required to bring a laptop or tablet for study, presentation preparation, and communication throughout the course.

PROVISIONAL AGENDA

DAY 1 – 17 JUNE 2025 (TUESDAY)		
08:30 – 09:00	Registration	
09:00 – 10:00	Opening Ceremony	<p>Welcome Remarks by Dr Steven Baptist, Principal of Sri Bestari Private Schools</p> <p>Welcome Remarks by Emeritus Professor Dato' Dr Mohd Jamil Maah, ISTIC GB Members</p> <p>Welcome Remarks by AETDEW President</p> <p>Welcome Remarks by Representative of MOE</p> <p>Keynote Address and Official Opening by Dato' Ir. Lee Yee Cheong, Honorary Chair of ISTIC, Former UNESCO-ITU Broadband Commissioner</p> <p>Group photo</p>
10:00 – 10:30	Tea Break	
10:30 – 12:00	Background of the AI Era and China's AI Education Strategy <i>Prof Han Liqun</i>	Characteristics of the Intelligent Era. Interpretation of China's AI Education Strategy and Practice.
12:00 – 14:00	Lunch	
14:00 – 14:30	Introduction to Training Content and Experience Sharing <i>Dr Shi Yan</i>	Design Philosophy of the "Artificial Intelligence Curriculum Guidelines for Primary and Secondary Schools." Teacher Training System Introduction: Basic Cognition → Technology Integration → Case Migration → Teaching Practice.
1430 – 15:30	Machine Perception Module <i>Prof Zhao ShuYing</i>	Core Concept Explanation (Various sensors and their uses). Integration of Teaching Tools (sensor kit demonstration, robot perception cases). Sample Lesson Demonstration ("Application of Sensors").
15:30 – 15:45	Tea Break	
15:45 – 17:00	Machine Cognition Module <i>Prof Zhao ShuYing</i>	Core Concept Explanation (feature and pattern recognition). Integration of Teaching Tools (Scratch programming environment). Sample Lesson Demonstration ("Garbage Classification Decision").
17:00 - 17:30	Group Discussion and Sharing	Teachers discuss in groups, share their understanding of concepts and teaching practice design
17:30	End of Day 1	

DAY 2 – 18 JUNE 2025 (WEDNESDAY)		
09:00 – 10:30	Machine Learning Module <i>Dr Shi Yan</i>	Core Concept Explanation (supervised, unsupervised, and reinforcement learning). Integration of Teaching Tools (Google Teachable Machine). Case Demonstration ("Using Teachable Machine or Lobe for Recognition").
10:30 – 10:45	Tea Break	
10:45 – 12:00	Neural Networks and Large Models Module <i>Dr Shi Yan</i>	Core Concept Explanation (neural networks, deep learning, large language models, etc.). Integration of Teaching Tools (Tensor Flow Playground). Discussion on Ethical Risks of Large Models.
12:00 – 14:00	Lunch	
14:00 – 15:00	Knowledge Representation and Reasoning <i>Prof Zhao ShuYing</i>	Core Concept Explanation (semantic networks, predicate logic, frame representation, etc., common knowledge representation forms. Introduction to knowledge reasoning, inductive reasoning, and case-based reasoning). Integration of Teaching Tools and Case Demonstration (introducing Protégé software for knowledge modeling, practicing reasoning with Python programming).
15:00 - 15:15	Tea Break	
15:15 - 16:30	Human-Computer Interaction and Collaboration <i>Prof Zhao ShuYing</i>	Introduction to Core Concepts (human-computer interaction, collaboration modes). Sharing and analysis of teaching cases (intelligent education platforms, intelligent assistants, etc.).
16:30 - 17:00	Group Discussion and Summary	Teachers discuss in groups, summarize case analysis insights.
17:30	End of Day 2	
DAY 3 –19 JUNE 2025 (THURSDAY)		
09:00 - 10:30	Experience Sharing by Local Expert Teachers <i>Zhang Yibao</i>	Inviting Malaysian and foreign expert teachers to share their AI teaching experiences and challenges.
10:30 - 10:45	Tea Break	
10:45 – 12:00	Group Discussion and Analysis (Breakout - 3 Group)	Teachers discuss in groups, analyze successful factors and case experiences.
12:00 - 14:00	Lunch	
14:00 - 15:30	Theme Selection and Teaching Design Small group (4-5 participants)	Teachers select themes in groups, design AI courses with expert guidance.
15:30 - 15:45	Tea Break	
15:45 - 16:45	Group Presentation and Summary <i>Prof Han Liqun & Dr Shi Yan</i>	Each group presents their teaching design plans. Training summary, and teacher feedback.

16:45 – 17:30	Closing Keynote Address by <i>Mr Goh Peng Ooi</i> Closing Remarks by Prof Han Liqun Closing Remarks by Dr Steven Baptist Closing Remarks by Professor ChM. Dr Mohd Basyaruddin Abdul Rahman, Chair of ISTIC Governing Board Certificate Awarding Ceremony	Closing remarks and certificate presentation.
17:30	End of Workshop	

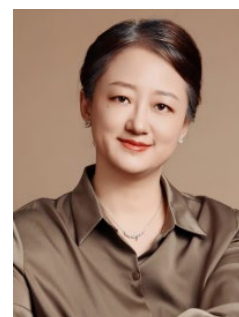
TRAINERS FROM CHINA SOCIETY FOR EDUCATION STRATEGY AND DEVELOPMENT

Professor Han Liqun, former Dean of the College of Information Engineering at Beijing Technology and Business University, Visiting Professor at Beijing University of Science and Technology, Beijing University of Posts and Telecommunications. Long-term engaged in teaching and research in the field of Artificial Intelligence, published more than 150 academic papers and published nearly 30 books. Presided over and conducted more than 40 scientific research projects and teaching and research projects: 8 national invention patents.



From 2005 to 2014, served as Vice President of the 5th and 6th Council of the Chinese Association of Artificial Intelligence; Since 2012, served as Vice Chairman of the Robotics Working Committee of the All-China Schools Sports Federation; Since 2015, served as Vice Chairman and Director of the Expert Committee of the Chinese Robotics Movement Working Committee; Since 2017, served as an Academician of the Academy of Engineering and Technology of the Developing World. Currently serves as Executive Director of the China Educational Development Strategy Society and Honorary President of the Artificial Intelligence and Robotics Education Committee.

Dr. Shi Yan, Ph.D. in Engineering, Associate Professor, Executive Director and Deputy Secretary-General of the Special Committee on Artificial Intelligence and Robotics Education of the Chinese Society of Educational Development Strategy. Former Deputy Director of the Department of Automation, School of Computer and Information Engineering, Beijing Technology and Business University; Former Deputy Secretary-General of the 2nd Working Committee on Intelligent Products and Industries of the Chinese Association for Artificial Intelligence.



She has long been engaged in teaching and scientific research in the field of artificial intelligence, as well as comparative studies on science and technology education in primary and secondary schools at home and abroad. She has published 3 works on artificial intelligence, 1 monograph, and 2 popular science books, and has won multiple teaching achievement awards.

Dr. Zhao Shuying is a Professor at Northeastern University of China and a Fellow of the Academy of Engineering and Technology for the Developing World (AETDEW). A pioneer in robotics, she was the winner of China's first Robot-Soccer World Championship. Dr. Zhao serves as the Executive Director of both the Special Committee on Artificial Intelligence and Robot Education under the China Education Development Strategy Association, and the Working Committee on Intelligent Products and Industries of the Chinese Association for Artificial Intelligence. She is also the Chief Science and Technology Communication Expert of Liaoning Province.



LIST OF PARTICIPANTS

No	Name	Organization	email
1	Izza Farhana Binti Khalid	SMK Bagan Terap, Selangor	
2	Norafiza Binti Razilah	SMK Bagan Terap, Selangor	
3	Devi A/P Govindasamy	SK (2) Taman Selayang, Selangor	
4	Hong Boon Liang	SMK Seri Gombak, Selangor	
5	Yasmin Binti Noorul Amin	SMK La Salle, Selangor	
6	Nurul Yusma Hanim Binti Ahmad	Kolej Tunku Kurshiah, Negeri Sembilan	
7	Muhamad Faiz Bin Roslin	SMK Panchor, Negeri Sembilan	
8	Nurkhausar Norim Binti Ahmad	Sekolah Kebangsaan Putrajaya Presint 5 (1)	
9	Muhammad Shahrol Bin Harun	Sekolah Kebangsaan Putrajaya Presint 18 (1)	
10	Nurfazliah binti Muhammad	SM Sains Seri Puteri, Selangor	
11	Muhammad Afham bin Bidin	SK Sungai Penchala, KL	
12	Stephen A/L Isaac Ponnudurai	SMK (L) Methodist Sentul, KL	
13	Ahmad Hafizi bin Mohamed	SK Bukit Damansara, KL	
14	Yeo Lai Bo	SMK Bandar Baru Sentul, KL	
15	Norsyahirah binti Mohamad Aziz	SK Bangsar, KL	
16	Dr. Kok Boon Shiong	Institut Pendidikan Guru Kampus Pendidikan Teknik, Negeri Sembilan	
17	Rahayu Binti Jaapar	Curriculum Development Division, Ministry of Education, Malaysia	
18	Mohd Hafizul Bin Hassan	Education Policy Planning and Research Division, Ministry of Education, Malaysia	
19	Imran Bin Mohamed Khawari	Educational Resources and Technology Division, Ministry of Education, Malaysia	
20	Mohd Thalji bin Ahmad Bakery	Teacher Professionalism Division, Ministry of Education, Malaysia	
21	Suhanna Binti Zainudin	SMK Ghafar Baba, Melaka	
22	Nur Rawaidah Rahmat	Institut Pendidikan Guru Kampus Darulaman, Kedah	
23	Dr Ahmad Haadzal Bin Kamarulzalis	SMKA Al Mashoor (L), Penang	
24	Abd Hasman Bin Abbas	SK St Patrick, Sabah	
25	Wan Farid Nazrin Bin Wan Din	SK Chenderong Batu, Kelantan	

26	Mohd Alif Amirol bin Md Suhaimi	SK Kampong Jaya, Terengganu	
27	Almasiah Binti Hassan	Institut Pendidikan Guru Kampus Tawau, Sabah	
28	Nor Azlina binti Ghazali	SK Seliau, Negeri Sembilan	
29	Dikdik Ahmad Fuadi	Smart Auladi Primary School (SD Smart Auladi), Indonesia	
30	Arif Firmansah	Smart Auladi Secondary School (SMP Smart Auladi), Indonesia	
31	Sasithorn Kiewkor	Phyathai School, Thailand	
32	Chananya Semsri	Ratwinit Bangkako School, Thailand	
33	Kim Visa	Battambang Teacher Education College, Cambodia	
34	Prof Madya Dr Maslin Masrom	Faculty of Artificial Intelligence, Universiti Teknologi Malaysia, KL	
35	Dr Nor Shaliza Kamaruddin	Faculty of Artificial Intelligence, Universiti Teknologi Malaysia, KL	
36	Mohd Faizal Zainoldin	SEAMEO RECSAM, Penang	
37	Baharulnizam Bin Baharum	SEAMEO RECSAM, Penang	
38	Sivaranjini A/P Sinniah	SEAMEO RECSAM, Penang	
39	Michelle Ooi Poh Chen	Sri Bestari Private School, KL	
40	Soon Mon Huay	Sri Bestari Private School, KL	
41	Nur Atiqah Binti Anwar	Sri Bestari Private School, KL	
42	Rubaneshmani a/p Subramaniam	Sri Bestari Private School, KL	
43	Bilal Ahmed Musani	Ideas Academy, KL	
44	Munawwir Syazilli Bin Ahmad Zaki	Tech Dome Penang, Penang	
45	Ahmad Shah Bin Eusoff	Tech Dome Penang, Penang	

ORGANIZING COMMITTEE

ISTIC

- Mr. Mohd Azim Noor
- [Name], [Position]

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AETDEW

- [Name], [Position]5

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- Dr Yap Kian Lim

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Sri Bestari Private Schools

- Dato Dr Sharifah Maimunah Syed Zain- Chairman Board of Governors
- Dr Steven Baptist- School Principal
- Rosnah Sulaiman Coordinator
- Shamsul Mutaza -Counsellor
- Pn Siti Normah
- Head of Primary School
- Roslina Zainal- Marketing & Admission Manager
- Michael Ng- Procurement Assistant Manager
- Fazlie Fadzil- IT Manager
- Leow Pek Yee - HR/Admin Manager
- Tricia Ong- Accounts & Finance Manager
- Phoebe Cheung- Head of Kindergarten

ORGANISERS

INTERNATIONAL SCIENCE, TECHNOLOGY AND INNOVATION CENTRE FOR SOUTH-SOUTH COOPERATION UNDER THE AUSPICES OF UNESCO (ISTIC)

The creation of the International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC) is a follow up of the Doha Plan



ISTIC
INTERNATIONAL SCIENCE, TECHNOLOGY AND
INNOVATION CENTRE FOR SOUTH-SOUTH
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of Action which has been adopted by the head of States and Government of the Group of 77 and China, during the meeting in Doha, Qatar, from 12-16 June 2005 on the occasion of the Second South Summit of the Group of 77. The Summit urged UNESCO to develop and implement a programme for South-South Cooperation in Science and Technology with the objective of facilitating the integration of a developmental approach into national science, technology and innovation policies, capacity building in science and technology through providing policy advice and exchange of experience and best practices, and creating a problem solving network of Centres of Excellence in developing countries as well as supporting the exchange of students, researchers, scientists and technologists among developing countries. ISTIC will act as an international platform offering sustainable programmes and services in producing holistic talents towards institutional excellence and augmenting sustainable development for South-South Cooperation. Details of ISTIC are available at www.istic-unesco.org

ACADEMY OF ENGINEERING AND TECHNOLOGY OF THE DEVELOPING WORLD (AETDEW)

The Academy of Engineering and Technology of the Developing World (AETDEW) was established to mobilize the engineering, technological, and scientific communities in developing countries to address global challenges and achieve the United Nations' Sustainable Development Goals (SDGs) by 2030. Founded in 2017, AETDEW emphasizes South-South cooperation and aims to leverage engineering and technological innovations to combat issues such as poverty, hunger, illiteracy, and climate change. The academy's membership includes a diverse range of stakeholders from government, industry, academia, and civil society, with a particular focus on young entrepreneurs and gender representation. Details of AETDEW are available at www.aetdew.org.

AETDEW

THE ACADEMY OF ENGINEERING AND
TECHNOLOGY OF THE DEVELOPING WORLD

SRI BESTARI PRIVATE SCHOOL

Sri Bestari Private School, located in Bandar Sri Damansara, Kuala Lumpur, is a private co-educational institution that offers holistic education from kindergarten to secondary level. The 15-acre campus provides a conducive and invigorating environment surrounded by lush greenery, fostering a positive learning atmosphere. Sri Bestari emphasizes a core value system of professionalism, excellence, and respect, and integrates the National KSSR and KSSM Curriculum with additional subjects and co-curricular activities to enhance students' educational experience. Details of Sri Bestari Private Schools are available at <https://sribestari.edu.my>



