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MAY
2024



International Industrial Revolution 4.0 Exposition

"INNOVATING IDEAS, TRANSPIRING DREAMS"

ABSTRACT BOOK

Strategic Partners:



Perpustakaan
Sultan Badlishah

Organized By:

**COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS,
UNIVERSITI TEKNOLOGI MARA, KEDAH BRANCH**

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UITM Cawangan Kedah Channel

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IREx 2024

The successful inauguration of IR4.0 Exposition IREx 2019 has witnessed ground breaking initiatives, ideas, and innovations materialised into numerous practical devices today. Treading on the same triumph, the College of Computing, Informatics, and Mathematics, UiTM Kedah is thrilled to announce the continuation of said event, IREx 2024 with the theme: *Innovating Ideas, Transpiring Dreams*.

The IREx 2024 aspires to incorporate even more exciting new technologies including, but not limited to, Information & Communication Technology (ICT), Educational Technology & Innovation (ED), Operational Excellence (OE), Internet of Things (IoT), Process Improvement, Ideas & Design, Multimedia, and Electronics that will chart new milestones in human history. This will serve as an excellent platform for scientists and innovators alike to meet the like-minded individuals and showcase inspiring ideas and notable innovations.

PROGRAM SCHEDULE

International Industrial Revolution 4.0 Exposition (IREx 2024)
21ST May 2024 (Tuesday)
Dewan Perdana, UiTM Kedah Branch

TIME	EVENT
8.00 – 9.00 am	Registration & Booth Set Up
9.00 am – 12.00 pm	Exhibition & Judging Session
12.00 pm – 2.00 pm	Obedient Drone Session & Break
2.00 pm – 5.00 pm	Official Closing & Prize Giving Ceremony
5.00 pm	Program Ends

Official Closing Ceremony

International Industrial Revolution 4.0 Exposition (IREx 2024)

TIME	EVENT
2.00 pm	Arrival of Guests and Participants
2.30 pm	Arrival of VVIP
	National anthem - Negaraku And Wawasan Setia Warga
2.40 pm	UiTM
	Welcoming Speech
3.00 pm	Rector's Welcoming Speech
	Officiating Speech
3.10 pm	Gimmick & Montage presentation
3.30 pm	Prize Giving Ceremony
4.00 pm	Photography
5.00 pm	Program Ends

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IRX068	PRO CROSS-MATH CHALLENGE	4
IRX082	MULTIPURPOSE SOAP	5
IRX083	PUFFER FISH BOAT	6
IRX092	MY GAMES ACADEMIA	7
IRX095	'ROBOCRAB' PEMBERSIH SAMPAH	8
IRX096	TG-ELMH V2 (TITI GAJAH-ENTER LAMP MERAH HIJAU VERSION 2)	9
IRX103	TANDAS PINTAR	10
IRX117	MESTO	11
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CATEGORY B

i-IGCSE STEM

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ABSTRACT - The IGCSE (International General Certificate of Secondary Education) is a highly rigorous international curriculum examination that offers over 70 subjects in various categories which includes STEM (Science, Technology, Engineering, and Mathematics) education. Thus, IGCSE is widely recognized as an international secondary school certification before advanced Level (A-Level) or pre-university studies. Cambridge International Examinations introduced IGCSE in 1988, Taking this opportunity, Maktab Rendah Sains Mara (MRSM)-IGCSE offers IGCSE programs in twelve MRSMs in Malaysia. Students learn the IGCSE syllabus from Form One until Form Four and the IGCSE checkpoint and examinations are completed during Form Two and Form Four. Various references and past year examination papers are available online, however, there is no specific portal for MRSM students taking IGCSE programs. The objective of i-IGCSE STEM is to provide an IGCSE MRSM online portal for MRSM students, teachers, and parents accessible using a QR code. i-IGCSE STEM guides students tallying to the syllabus with tutorials on previous years' papers. The papers are sorted according to the subjects required for each level (Form 2 and Form 4). This portal provides a discussion board for teachers, parents, and students. It gives full benefits to students allowing discussion among students and teachers. Essentially, this portal is an additional reference for students besides those given by the teachers. Therefore, the i-IGCSE STEM portal eases the IGCSE learning process and supports STEM Education in Malaysia.

Keywords: IGCSE, MRSM, STEM, International Examination, Education



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