

IEM KLESF ROBOTIC CHALLENGE 2024

BACKGROUND

The Institution of Engineers Malaysia (IEM) being the forefront in promoting and advancement of the science and profession of engineering took up the challenge to deliver series of higher quality STEM and STI activities for school students and youth through digital classes, talks, hands-on activities and competition since 2018. For year 2024, IEM plans to conduct **IEM KLESF Robotic Challenge 2024 (IEMKLESF RC 2024)** in conjunction with **Kuala Lumpur Engineering Science Fair 2024 (KLESF 2024)** targeting **national level** participation.

IEMKLESF RC 2024 will involve **online and physical workshops** to introduce the students to the robotic and innovation challenge, and then students with help from teachers and coaches will look for or build and practice with robot that is suitable for the challenge, compete physically in qualifying round, and finally the best student shall compete physically in the final round.

Competition is open to all students from government and private **primary and secondary** schools of up to 17 years old.

SCHEDULE

No.	Event	Date	Location
1	Competition Launch & Registration Start	9 th October 2024	Online
4	Introduction Workshop for Primary and Secondary school categories	14 th Oct – 3 rd Nov 2024	Online
5	Competition Registration Dateline	3 rd November 2024	Online
6	Qualifying Round	9 th – 10 th November 2024	MIECC
7	Final Round	9 th – 10 th November 2024	MIECC

REGISTRATION FEES

Primary & Secondary Categories	FREE
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ENQUIRIES

IEM KLESF Robotic Challenge 2024 Secretariat: **Ms. Rose / Ir. Amir Hussein Bin Jaafar (0122973414)**

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Organized by:

*Information & Communication Technology
Special Interest Group (ICTSIG)
IEM STEM Promotion Club*

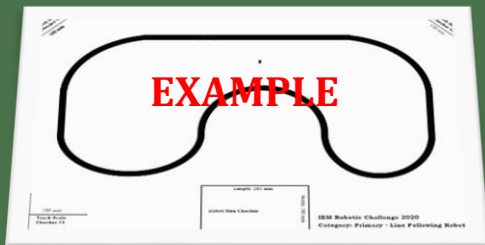
Co-organized with:



COMPETITION CATEGORIES

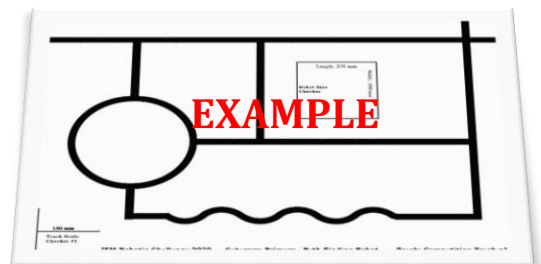
A. LINE FOLLOWING ROBOT

- Build a robot that moves AUTONOMOUSLY along the BLACK LINE on a single track circuit from the START position to the END position.
- The robot also needs to achieve the FASTEST time
- Using only robot that is built using off the shelves controller and components (DIY) i.e. not bought in and purpose built robot
- To ensure robot is built using off the shelves components: main controller, motor controller and sensors must be on different PCB and are connected to each other using wires
- Two open sub-categories:
 - Primary school students (6 to 12 years old)
 - Secondary school students (12 to 17 years old)
- Participants: Maximum 2 students per team
- Team coordinator: 1 teacher / coach / mentor



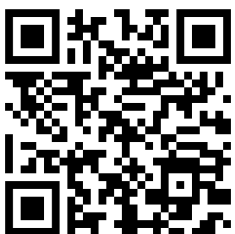
B. PATH FINDING ROBOT

- Use a robot that moves AUTONOMOUSLY along the BLACK LINE or the WHITE LINE on a circuit that has intersections and goes through all the checkpoints in the specified order from the START position to the END position.
- The robot also needs to achieve the FASTEST time
- Can use bought-in or purpose built robot
- Two open sub-categories:
 - Primary school students (6 to 12 years old)
 - Secondary school students (12 to 17 years old)
- Participants: Maximum 2 students per team
- Team coordinator: 1 teacher / coach / mentor



Register NOW, limited participants for each categories!

REGISTRATION FORM



IEM KLESF Robotic Challenge 2024 Registration Form.

<https://forms.gle/NgNCk7fVaMTGaC7BA>