ROBOCHALLENGE MRSM 2023

THE OLYMPIC

3D DESIGN ROBOT

3D DESIGN ROBOT RULES & REGULATIONS

Version 1.0 Released 2nd May 2023

Competition Categories & Age Group

1. Each team should comprise of 2 students.
2. Team members must be from the same MRSM.
3. Maximum 2 teams per MRSM.

General Overview

Participants are required to build a robot using 3D design software.
Participants entering the competition will be expected to use the Engineering Design Process to create their robot design.
The competition allows students to develop skills in robotic system, 3d design skills, mechatronics and researching about new technologies to build a robot.

Theme Of Design Robot

1. Robot Transportation
2. Robot Building Structure
3. Helping Robot
4. Health Care Robot

Competition Rules

1. **Design Robot**
   - 1.1. Participants only need to create one robot in a form of a 3D model only. No physical robot is required to participate in this competition.
   - 1.2. The design of the robot created must meet the theme of `The Olympic`
   - 1.3. The robot has no restriction of type, design, or structure. For example, participants can build humanoid robot, mobile robot, system etc. if they meet the theme.

2. **3D Design Software**
   - 2.1. Participants are allowed to use any software currently available whether paid or free.
   - 2.2. The software used must be able for drawing 3D shapes and converting them into models that could be used to showcase graphics or represent a certain object.
   - 2.3. Software that can be used is Sketch Up Pro, Fusion 360, Solidworks, Thinkercad etc.

3. **Robot Design Submission**
   - 3.1. Participants only need to submit a video that explains the design of their robot. The videos produced must clearly show the description of their robot, the function of the robot parts and future marketability.
   - 3.2. Participants are encouraged to use the screen recording method directly from the 3D software and record the voice for explanation.

3.3. Video length allowed is **3 minutes maximum** only.
3.4. Upload to YouTube (set as Unlisted) and provide a link to the Robochallenge committee.
3.5 Winners will be announced during closing session at MRSM Bentong.

Judging Criteria

BORANG PEMARKAHAN PERTANDINGAN *3D DESIGN*

BIL.	Kriteria Pemarkahan	Markah Maksimum	MRSM:									
			1	2	3	4	5	6	7	8	9	10
1.	TEMA • Ketepatan tema pertandingan	10										
2.	Kreativiti dan kegunaan • Kreativiti dalam persembahan dan isi kandungan. • Teknik penggayaan yang kreatif. • Menggunakan pelbagai teknologi untuk menghasilkan inovasi. • Nilai dan pengajaran.	10 10 10 10										
3.	Kualiti dan keaslian • Keaslian konsep / pelaksanaan. • Penggunaan teknikal. • Audio. • SOFTWARE yang bersesuaian	10 10 10 10										
4.	Teknik persembahan • Teknik persembahan yang menarik dan komprehensif.	10										
	JUMLAH SKOR	100	JUMLAH:									

TIME LINE