

MALAYSIA TECHLYMPICS 2026

KERTAS KONSEP PERTANDINGAN

COMPETITION CONCEPT PAPER

3.2K & 3.2R

Cabaran AI Vibe Coding Drone

PLATFORM RASMI / Official Platform

EptimEdu — Ruang Khas Techlympics (Techlympics Arena)

EptimEdu — Techlympics Special Space (Techlympics Arena)

FOKUS TEKNOLOGI / Technology Focus

Kecerdasan Batuan
*Artificial Intelligence
(AI)*

Robotik dan Dron
Robotics and Drone

Kejuruteraan
Engineering

Teknologi Angkasa & Aeroangkasa
Space & Aerospace Technology

Matlamat Pembangunan Mampan
(SDGs)
Sustainable Development Goals

Penggunaan Tenaga Nuklear yang
Selamat
Safe Use of Nuclear Energy

1.0 PENGENALAN / INTRODUCTION

Penggunaan teknologi dron semakin penting bukan sahaja untuk hobi dan fotografi, tetapi juga dalam ketenteraan, carilamat, logistik, sekuriti dan lain-lain. Pertandingan ini memberi peluang murid untuk merasai sendiri pengalaman mengaturcara dron AI supaya sampai ke destinasi dengan selamat.

EN: Drone technology is increasingly important not only for hobbies and photography, but also in military, search-and-rescue, logistics, security, and more. This competition allows students to experience programming AI drones to reach destinations safely.

2.0 OBJEKTIF / OBJECTIVES

2.1 Mendedahkan murid kepada sains dan teknologi dron & aeroangkasa.

EN: To expose students to drone and aerospace science and technology.

2.2 Memahami aplikasi dron dalam dunia sebenar.

EN: To understand real-world drone applications.

2.3 Mempelajari kaedah mengatur cara dron menggunakan block coding.

EN: To learn drone programming using block coding.

2.4 Mengamalkan penerbangan selamat dan corak misi.

EN: To practice safe flight and mission patterns.

2.5 Menyelesaikan masalah berkaitan pola penerbangan.

EN: To solve problems related to flight patterns.

2.6 Mengaitkan program dengan subjek RBT di sekolah.

EN: To link the program with the RBT subject in schools.

3.0 KATEGORI PENYERTAAN / PARTICIPATION CATEGORIES

3.1 Sekolah Rendah / Primary School

Tahap 2 (10–12 tahun), murid sekolah rendah KSSR.

3.2 Sekolah Menengah / Secondary School

(13–17 tahun), murid sekolah menengah KSSM.

4.0 PERATURAN DAN SYARAT PERTANDINGAN / COMPETITION RULES AND CONDITIONS

4.1 Umur peserta ditetapkan mengikut tahun lahir (Sekolah Rendah: 2014–2019; Sekolah Menengah: 2009–2013).

EN: Age eligibility based on year of birth.

4.2 Setiap pasukan terdiri daripada 1 orang murid

EN: Each team consists of 2 students + 1 mentor teacher.

4.4 Sijil penyertaan diberikan kepada semua peserta.

EN: Certificates are provided to all participants.

4.5 Keputusan juri adalah muktamad; bantahan RM300 dalam 10 minit selepas pertandingan.

EN: Judges' decisions are final; protest fee RM300 within 10 minutes.

PERINGKAT NEGERI / STATE LEVEL

1. Pertandingan peringkat negeri akan dilaksanakan secara atas talian.
The state-level competition will be conducted face-to-face.
2. Guru pembimbing perlu memastikan peserta mempunyai peranti yang dilengkapi dengan perisian yang akan dipakai dan peranti tersebut mesti disambungkan kepada internet sepanjang masa pertandingan dijalankan.
Mentor teachers must ensure participants have devices equipped with the required software and connected to the internet throughout the competition.
3. Untuk Kategori Sekolah Rendah dan Menengah, satu pasukan yang terdiri daripada 1 orang peserta dari mana mana sekolah tanpa mengira jumlah penyertaan kumpulan.
For Primary School, only one team of 2 best students from each school qualifies for the state level.

Tugasan Sekolah Rendah / Primary School Tasks

1. Tugasan perlu diberikan secara prompt di ruangan yang disediakan.
The task must be given promptly in the space provided.
2. Melalui arahan tersebut, blok pengaturcaraan akan dihasilkan.
Through that instruction, the programming blocks will be generated.
3. Dron perlu berlepas dari ruang berlepas dan bergerak ke ruangan permulaan.
Drone must take off from the Takeoff/Landing Area and move to the starting zone.
4. Dron mesti melalui halangan "Through the Tunnel" tanpa menyentuh dinding terowong.
Drone must pass through the "Through the Tunnel" obstacle without touching the tunnel walls.
5. Dron perlu melakukan pergerakan slalom ke atas dengan mengikut laluan zig-zag di antara tiang halangan.
Drone must perform an upward slalom movement, zig-zagging between obstacle poles.
6. **Sekolah Menengah / Secondary School**
(Semua peraturan sama seperti Sekolah Rendah.)
(All rules are the same as Primary School.)

PERINGKAT KEBANGSAAN / NATIONAL LEVEL

1. Pertandingan peringkat kebangsaan akan dilaksanakan secara atas talian.
The national-level competition will be conducted face-to-face.

Tugasan Sekolah Rendah / Primary School Tasks

Sekolah Rendah / Primary School Tasks

1. Tugas perlu diberikan secara prompt di ruangan yang disediakan.
The task must be given promptly in the space provided.
2. Melalui arahan tersebut, blok pengaturcaraan akan dihasilkan.
Through that instruction, the programming blocks will be generated.
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6.0 HADIAH-HADIAH PERTANDINGAN / COMPETITION PRIZES

6.1 Peringkat Negeri: Pingat.

EN: State Level: Medal.

6.2 Peringkat Kebangsaan: Wang tunai & pingat

EN: National Level: Cash prize & medal.

7.0 SIJIL PENYERTAAN / PARTICIPATION CERTIFICATES

7.2 Peringkat Negeri: Sijil penyertaan + sijil pencapaian (Top 5).

7.3 Peringkat Kebangsaan: Sijil penyertaan + sijil pencapaian (Top 5).

EN: Certificates at all levels; achievement certificates for Top 5 winners.

8.0 RUBRIK DAN KRITERIA PENILAIAN / SCORING RUBRIC AND CRITERIA



The screenshot shows a mobile application interface for a challenge. At the top, there are tabs for 'CHALLENGE', 'RESET', and 'BRIEFING'. Below the tabs, the current score is displayed as '10/24'. A list of tasks follows, each with a number, an icon, a description, and a score. The first task, 'Launch Launch LP', is completed with a score of +10/10. The remaining tasks are 'Land on Goal A' through 'Land on Launch LP', each with a score of 0/2.

SCORE		
10/24		
1	Launch Launch LP	+10/10
2	Land on Goal A	0/2
3	Hover over Goal B	0/2
4	Land on Goal C	0/2
5	Land on Goal D	0/2
6	Land on Goal E	0/2
7	Fly to Launch LP	0/2
8	Land on Launch LP	0/2

9.0 PROSEDUR PENYERTAAN DAN FAQ / REGISTRATION PROCEDURE AND FAQ

9.1 Rujuk laman rasmi Techlympics.

EN: Refer to official Techlympics website.

10.0 GARIS MASA / TIMELINE

Garis Masa Untuk Pertandingan *Walk In Negeri*:

Zon / Zone	Tarikh Pertandingan / Competition Date
Selatan / <i>Southern</i> - Johor - Melaka	22 & 23/7/2026
Tengah / <i>Central</i> - Selangor - Kuala Lumpur - Putrajaya N. Sembilan	10 & 11/8/2026
Timur 1.0 / <i>Eastern 1.0</i> - Terengganu - Pahang	19 & 20/8/2026
Timur 2.0 / <i>Eastern 2.0</i> Kelantan	23/8/2026
Utara / <i>Northern</i> - Perlis - Kedah - Pulau Pinang - Perak	8 & 9/9/2026
Sarawak	14 & 15/9/2026
Sabah & Labuan	22 & 23/9/2026

“Penafian: Segala maklumat yang terkandung dalam dokumen ini adalah tertakluk kepada sebarang perubahan dari semasa ke semasa.” / “Disclaimer: All information contained in this document is subject to change from time to time.”

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