



KEMENTERIAN PENGAJIAN TINGGI

ROBOCON

MALAYSIA 2022

SESI TAKLIMAT TEKNIKAL KETIGA
20 Mei 2022 (JUMAAT) 2.45 PTG

"Merempuh Cabaran Membina Impian"



CARTA PERBATUAN ROBOCON MALAYSIA 2022



7 Jan 2022

Taklimat teknikal pertama



10 Jan - 27 Mac

Pendaftaran Pasukan IPT di Laman Web ROBOCON Malaysia 2022



25 Jan 2022

Sesi Perkongsian Pasukan Juara ROBOCON 2021



1 April 2022

Taklimat Teknikal ke-2



20 Mei 2022

Penghantaran Laporan Teknikal



20 Mei 2022

Taklimat Teknikal ke-3



2-5 Jun 2022

Pertandingan ROBOCON Malaysia 2022 (Penang)



Jun - Julai 2022

Persiapan Pasukan Pertandingan Antarabangsa (Video dan Robot)



21 OGOS 2022

ABU ROBOCON Peringkat Antarabangsa 2022 (New Delhi, India)

LATEST UPDATE ON ROBOCON INTERNATIONAL 2022



[Home](#) [Game Rules](#) [Videos](#) [News](#) [FAQ](#) [Ask](#) [Venue](#) [Sponsors](#) [Contact Us](#)



ABU ROBOCON 2022

SUNDAY, 21 AUG, 2022

96

DAYS

16

HOURS

37

MINUTES

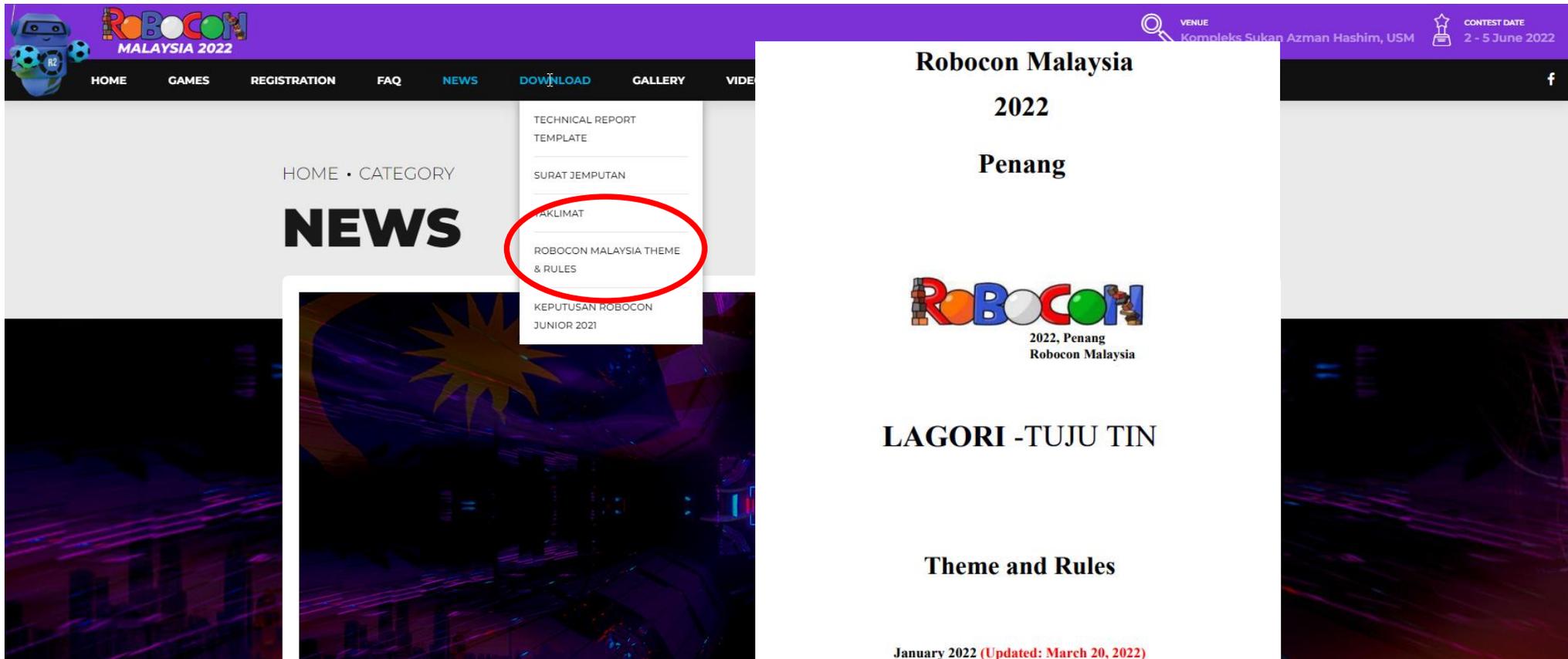
49

SECONDS

**As per the decision of the International Contest Committee,
ABU Robocon 2022 will be based on
“Online Game Rules”.**

Visit [Online Game Rules](#) for Details

ROBOCON MALAYSIA 2022: FACE-TO-FACE MODE



The image displays a screenshot of the Robocon Malaysia 2022 website. The top navigation bar includes the Robocon Malaysia 2022 logo, a search icon, the venue 'Kompleks Sukan Azman Hashim, USM', and the contest date '2 - 5 June 2022'. The main menu features 'HOME', 'GAMES', 'REGISTRATION', 'FAQ', 'NEWS', 'DOWNLOAD', 'GALLERY', and 'VIDEO'. A dropdown menu under 'DOWNLOAD' lists several items, with 'ROBOCON MALAYSIA THEME & RULES' circled in red. Below the menu, the 'NEWS' section is visible, featuring a large image of the Malaysian flag and a robot. An inset image shows the cover of the 'LAGORI -TUJU TIN' theme and rules document, which includes the Robocon Malaysia 2022 logo, the title 'LAGORI -TUJU TIN', and the subtitle 'Theme and Rules'. The document is dated 'January 2022 (Updated: March 20, 2022)'.

LOKASI ROBOCON MALAYSIA 2022

Kompleks Sukan Azman Hashim, USM



Where to stay during the tournament?

SENARAI HOMESTAY		SENARAI HOTEL	
	<p>AE HOMESTAY 14, Jalan Sungai Ara 2, Taman Sungai Ara, Bayan Lepas, 11900 Bayan Lepas, Penang ☎ 0134390252</p>		<p>U HOTEL 676 Jalan Sungai Dua 11700 Georgetown, Penang ☎ 04-6581000</p>
	<p>GHEE HOMESTAY 6 Jalan Permai 11700 Gelugor, Penang</p>		<p>HOTEL SERI MALAYSIA 7 Jalan Mayang pasir 2 11950 Bayan Lepas, Penang ☎ 04-6429452</p>

ACCOMMODATION

SENARAI HOMESTAY		SENARAI HOTEL	
	<p>NISREEN HOMESTAY 2B-4-8, Saujana Damai, Jalan Sungai Tiram 3, 11900 Bayan Lepas, Penang</p>		<p>POWER HOTEL 364 Jalan Sultan Azlan Shah 11700 Gelugor, Penang ☎ 016-400 3536</p>
	<p>MUSLIM HOMESTAY 8, Lintang Bukit Kecil 3, Taman Sri Nibong, 11900 Bayan Lepas, Penang</p>		<p>AG HOTEL 350-E Jalan Sultan Azlan Shah 11700 Gelugor, Penang ☎ 04-656 4362</p>
	<p>ANGGERIK LODGING 351, Jalan Hilir Pemancar 11700 Gelugor, Penang ☎ 04-658 3760</p>		<p>ATTA HOTEL No. 412-1-1, Jalan Bukit Dumbar Jelutong 11600 Georgetown, Penang ☎ 04-668 1111</p>

ACCOMMODATION

SENARAI HOMESTAY		SENARAI HOTEL	
	<p>JSW INN 2102 Tingkat Sungai Gelugor 6 11700 Gelugor, Penang ☎ 012-548 1187</p>		<p>OLIVE TREE HOTEL 76 Jalan Mahsuri 11950 Bayan Lepas, Penang ☎ 04-637 7777</p>
	<p>ARTE S PENANG HOMESTAY 3-P1-2 Persiaran Bukit Gambir 11700 George Town, Penang ☎ 012-590 6588</p>		<p>EASTIN HOTEL 1, Solok Bayan Indah, Queensbay 11900 Bayan Lepas, Penang ☎ 04-6121111</p>

Game Rules FAQ - Updated

The screenshot shows the website for Robocon Malaysia 2022. The top navigation bar includes links for HOME, GAMES, REGISTRATION, FAQ, NEWS, DOWNLOAD, GALLERY, VIDEOS, and CONTACT US. The FAQ link is circled in red, and a dropdown menu is visible with two options: GENERAL FAQ and GAME RULES FAQ. The main content area features a large banner with the text "Days Left for the Contest" and a countdown timer showing 16 DAYS, 15 HOURS, 22 MINUTES, and 33 SECONDS. At the bottom, there are logos for Universiti Kuala Lumpur, UMS (Universiti Malaysia Sabah), Universiti Malaysia Pahang, and UNIVERSITI MALAYA.

VENUE Kompleks Sukan

HOME GAMES REGISTRATION **FAQ** NEWS DOWNLOAD GALLERY VIDEOS CONTACT US

GENERAL FAQ
GAME RULES FAQ

Days Left for the Contest

16 DAYS 15 HOURS 22 MINUTES 33 SECONDS

UNIVERSITI KUALA LUMPUR UMS UNIVERSITI MALAYSIA SABAH Universiti Malaysia PAHANG UNIVERSITI MALAYA

Latest FAQ

Q1: According to 2.1.14 and 2.2.18, Hitter will be forced to retry and cannot restart for 15 seconds if the Hitter Ball thrown by Hitter R1 hits any part other than the plate and the pipe of Seeker R2 **AND; the Ball on Head is displaced. From the statement above, 2 conditions are required to be fulfilled in order for R1 Hitter to force retry.**

So, if Hitter R1 throws the Hitter Ball and hit any parts other than the plate and the pipe of Seeker R2 BUT the Ball on Head is NOT displaced, does this means that Hitter R1 does not have to be forced to retry? Since only one of the two conditions are met.

A1: Yes, that is correct. However, if it is deemed intentional, the team is subjected to disqualification. Please refer Section 5.2.

Q2: If the lagori tears or puncture slightly when it is being held by R2 Seeker, will that be considered as a violation or disqualification?

A2: It is subjected to judge's decision. Any case deemed intentional however, the team will be disqualified.

Q3: After the Lagori Break Shot time is over, will the Seeker Balls that remained on the game field be removed or just left there as it is?

A3: The seeker balls are left there as they are throughout the round.

Q4: Since it is only mentioned that both robots have to retry together, is it therefore allowed for both the robots to start individually. Meaning that, each robot does not have to wait for the other in order to continue its task.

A4: Both robots are allowed to start individually.

Q5: During the Lagori Pile session, will the lagori which has gone out of the lagori area due to Seeker R2's movement be removed by the judge or just left there as it is? The reason is because the gone out lagori might disturb the path for the Hitter team's robots.

A5: The lagori is left as it is, if it does not interrupt the path and movements of Hitter robots. Otherwise, it will be cleared by the judge.

Q6: For BOH part, can the skru head exceed the BOH plate which the skru is functioning to attach the plate with the Robot R2 body?

A6: Yes. Make sure it is not exceed to long.

Q7: It is stated that the allowed materials are PVC pipe and metal steel plate. However, we could not find the exact dimension of the materials, mainly the thickness of PVC pipe could not meet the requirement. What if we used 3D printing with Polylactic Acid (PLA) plastic for both pipe and plate, is it acceptable?

A7: You must only use PVC or MS. Our suggestion is that most teams are using 4" pvc pipe that can be bought from hardware shop. 3D printing parts are not strong enough for the application.

Q8: According to faq3 2.2-14 in ABU ROBOCON, it is mentioned that the lagori disc/s which is knocked off Seeker R2's hand by the Hitter Ball should not be manually picked up by the team members but rather by Seeker R2 itself. If so, does this apply in this upcoming national competition as well?

A8: Answer: No, it does not apply to ROBOCON Malaysia. The lagori will be picked up by the team and placed at its previous position under judge's permission, whilst Hitter team must retry. This is aligned with FAQ 2.2-16 (ROBOCON Malaysia)

Q9: Can we paint the BOH pipe and plate blue instead of buying a blue pvc or blue MS?

A9: Answer: Yes, you can color in blue.

Q10: For the certificate, is it will be received by all students that involves with team? In the registration page, there is team crew, team member and team support.

If our team consists of 20 students, 1 team leader + 3 crew + 3 member + 13 support. Are all of students will get the certificates for joining Robocon 2022.

A10: Official Certificate for ROBOCON2022 will be given to 1 team leader + 3 crew operator + 3 members.

Q11: Commonly every team will be provided a booth, are the robots R1 and R2 left in the booth area through the event?

A11: It is not necessarily to put the robots inside the pit through the event. It is allowed if you want to take your robot out of the pit area.

Q12: Can we use the Robocon logo to put on our team t-shirt?

A12: Yes, you can.

Q13: Are we allowed to use cable ties or bolts and nuts to fix BOH plate on R2 as the fastener used will protrude above the upper surface of BOH plate?

A13: Yes, it is allowed.

Q14: Will Hitter R1 get a violation for unintentionally hitting the opponent's R1 and/or operators? Since the opponent's Seeker R 2 might stand in front of its Seeker R1 or operators.

A14: It is up to the judge to decide. If it is deemed as violation, Hitter team must retry.

Q15: If part/parts of Seeker R2 breaks after being hit by Hitter R1, will Seeker R2 be disqualified for failing to adhere to safety instructions or will R1 Hitter be disqualified for damaging the opponent's Seeker R2 even though unintentional. Or will the game still continue as usual until the time ends?

A15: Two conditions here. (1) If the broken part/parts of Seeker R2 do not prevent it from functioning, the game will continue. Hitter team must retry. (2) If the broken part/parts of Seeker R2 prevent it from functioning, the game will stop and Hitter team will be disqualified.

Q16: Is there any violation if both robots of the same team touch each other?

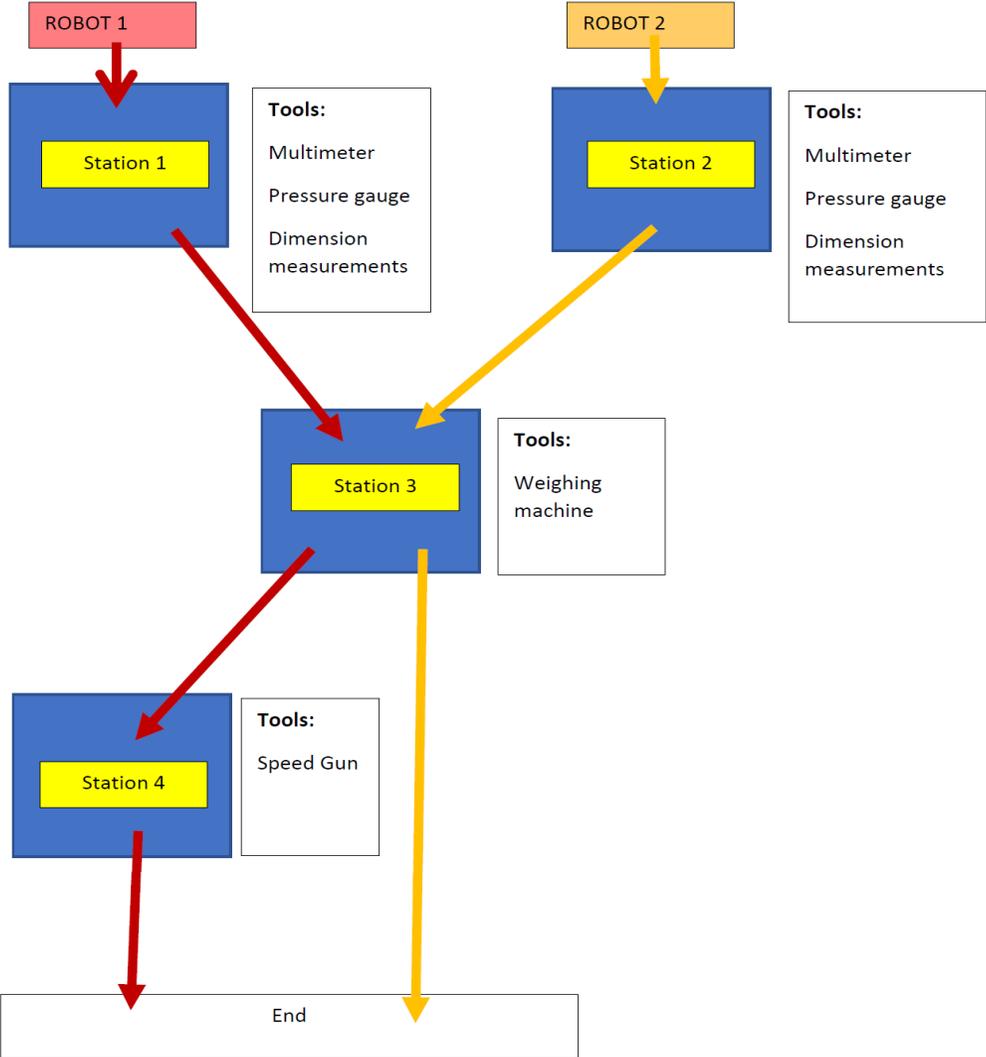
A16: No.

Q17: Is there an error in the recent updated Robocon Malaysia FAQ 2.1-4? Because according to the international faq2 [3-2], operators can enter their respective colour areas.

A17: Yes, it is allowed for the operators to enter their respective colour areas. We do apologize for this blunder

ROBOT INSPECTION

MOVEMENT OF ROBOTS DURING ROBOT CHECK



ROBOT INSPECTION CHECKLIST

ROBOCON INSPECTION CHECKLIST

ROBOT 1

TEAM NAME:

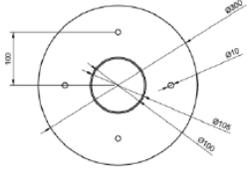
Robot1 Inspection Status:

PASS / FAIL

1	STATION 1 / R1	
1.1	Robot Size	
	Less than 1000 mm in length and 1000 mm in width	PASS / FAIL
1.2	Battery Voltage (<24V) <input type="text"/>	PASS / FAIL
	Ask the team - Maximum Voltage at the robot ($\leq 42V$) <input type="text"/>	PASS / FAIL
1.3	Using Compressed Air (YES / NO). If YES, ≤ 600 kPa	PASS / FAIL
1.4	Not sticking to the floor	PASS / FAIL
1.5	Ball Throwing Mechanism (not damaging the balls)	PASS / FAIL
1.6	Emergency Stop Button on the Robot	PASS / FAIL
1.7	Remote Control (Wired/Wi-Fi/Zigbee/Bluetooth)	PASS / FAIL
1.8	Having wheels (YES / NO)	
1.9	Having gripper/suction (YES / NO)	
1.10	Using Laser (YES / NO) – If Yes, Class 2 or less	PASS / FAIL
3	STATION 3	
3.1	Weight of Robot 1, $W_{R1} =$ <input type="text"/>	
	$W_{R1} + W_{R2} =$ <input type="text"/> , less than 50 kg	PASS / FAIL
4	STATION 4	
4.1	Ball Speed = <input type="text"/> <input type="text"/> <input type="text"/>	
	Less than 30 km/h	PASS / FAIL

TEAM NAME:

Robot2 Inspection Status: PASS / FAIL

1	STATION 2 / R2	
1.1	Robot Size	
	Less than 1000 mm in length and 1000 mm in width	PASS / FAIL
	Height:	
	Less than BOH (need to put the ball on BOH)	PASS / FAIL
	1200 mm – 1250 mm	PASS / FAIL
1.2	Battery Voltage (≤24V) <input type="text"/>	PASS / FAIL
	Ask the team - Maximum Voltage at the robot (≤42V) <input type="text"/>	PASS / FAIL
1.3	Using Compressed Air (YES / NO). If YES, ≤ 600 kPa	PASS / FAIL
1.4	BOH  	
	Dimension Inner diameter of the pipe is less than 105 mm	PASS / FAIL
	Plate's upper surface - Height (1200 mm – 1250 mm)	PASS / FAIL
1.4	Lagori Gripping	
	Not piercing	PASS / FAIL
1.6	Emergency Stop Button on the Robot	PASS / FAIL
1.7	Remote Control (Wired/Wi-Fi/Zigbee/Bluetooth) RC is not allowed.	PASS / FAIL
1.8	Using Laser (YES / NO), If YES -Class 2 or less	PASS / FAIL

3	STATION 3	
3.1	Weight of Robot 2, $W_{R2} =$ <input type="text"/>	
	$W_{R1} + W_{R2} =$ <input type="text"/> , less than 50 kg	PASS / FAIL

TOURNAMENT SCHEDULE



**JADUAL PERTANDINGAN
PENGANJURAN ROBOCON MALAYSIA 2022
PADA 2 HINGGA 5 JUN 2022 BERTEMPAT DI KOMPLEKS SUKAN AZMAN
HASHIM, USM PULAU PINANG**

2 JUN 2022 (KHAMIS)

- 8.00 pagi : Pendaftaran Pasukan
- 8.30 pagi : Pasukan Mendaftar Masuk ke Pit
- 9.00 pagi : Taklimat Urusetia Pertandingan
- 10.00 pagi : *Test Run* - Kalibrasi Robot dan *Gamefield*

3 JUN 2022 (JUMAAT)

- 8.00 pagi : Pendaftaran Pasukan dan Robot Check
- 9.00 pagi : **Perlawanan Peringkat Kumpulan**
- 12.30 tengahari : Rehat dan Makan Tengahari
- 2.30 petang : **Perlawanan Peringkat Kumpulan**
- 5.30 petang : Perlawanan Tamat

4 JUN 2022 (SABTU)

- 8.00 pagi : Pendaftaran Pasukan dan Robot Check
- 9.00 pagi : **Perlawanan Peringkat Kumpulan**
- 12.30 tengahari : Rehat dan Makan Tengahari
- 2.30 petang : **Perlawanan Peringkat Kumpulan**
- 5.30 petang : Perlawanan Tamat

Makluman tambahan

Pasukan boleh berada di Kompleks Sukan Azman Hashim sehingga jam 10 malam. Selepas 10 malam, Kompleks akan ditutup untuk proses sanitasi.

TOURNAMENT SCHEDULE

PERTANDINGAN PUSINGAN AKHIR DAN MAJLIS PERASMIAN PENUTUP ROBOCON MALAYSIA 2022

5 JUN 2022 (AHAD)

8.00 pagi	:	Pendaftaran Pasukan dan Robot Check	11.20 pagi	:	Ucapan Perasmian Penutup YB Datuk Seri Dr. Noraini Ahmad Menteri Pengajian Tinggi
8.30 pagi	:	Perlawanan Peringkat Suku Akhir			
9.30 pagi	:	Perlawanan Peringkat Separuh Akhir	11.45 pagi	:	Gimik Majlis Perasmian Penutup ROBOCON Malaysia
10.00 pagi	:	Ketibaan tetamu jemputan		:	Sesi Penyampaian Hadiah oleh YBhg. Dato' Seri Abdul Razak bin Jaafar Ketua Setiausaha Kementerian Pengajian Tinggi
10.15 pagi	:	Ketibaan YBhg. Dato' Seri Abdul Razak bin Jaafar Ketua Setiausaha Kementerian Pengajian Tinggi		:	Sesi Bergambar
10.30 pagi	:	Sesi Penentuan Tempat Ketiga dan Keempat Sesi Pertandingan Akhir		:	Jamuan Tengah Hari
11.00 pagi	:	Ucapan oleh YBhg. Prof. Dato' Dr. Faisal Rafiq Mahamd Adika Naib Canselor Universiti Sains Malaysia	12.30 tengahari	:	Perkongsian Juara ROBOCON Malaysia 2022
11.10 pagi	:	Ucapan oleh YBhg. Dato' Seri Abdul Razak bin Jaafar Ketua Setiausaha Kementerian Pengajian Tinggi	1.00 petang	:	Tamat dan Bersurai

PENDAFTARAN PASUKAN

Lokasi

- Berhadapan pintu masuk sebelah kanan Kompleks Sukan Azman Hashim

Masa

- 2hb Jun 2022 , 8.00 am – 9.00am

Keperluan

- Telah membayar deposit dan menghantar laporan teknikal

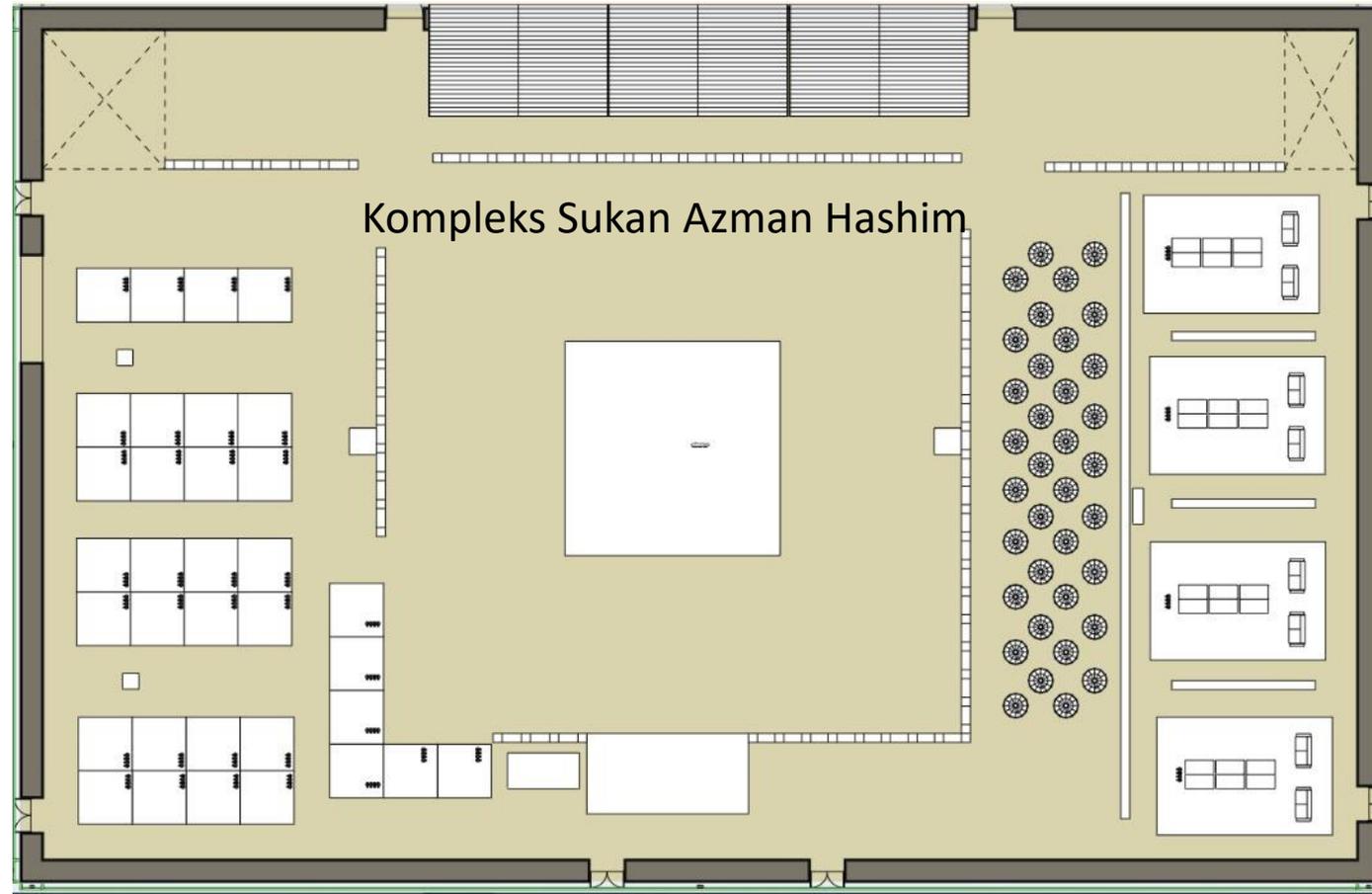
Aktiviti

- Menandatangani borang kehadiran oleh pengurus pasukan – Deposit RM 500 dikembalikan

Maklumat tambahan

Pasukan yang mempunyai kekangan untuk tiba pada sebelah pagi masih boleh membuat proses pendaftaran kerana meja pendaftaran akan dibuka sehingga 3.00 ptg.

LOKASI PENDAFTARAN PASUKAN

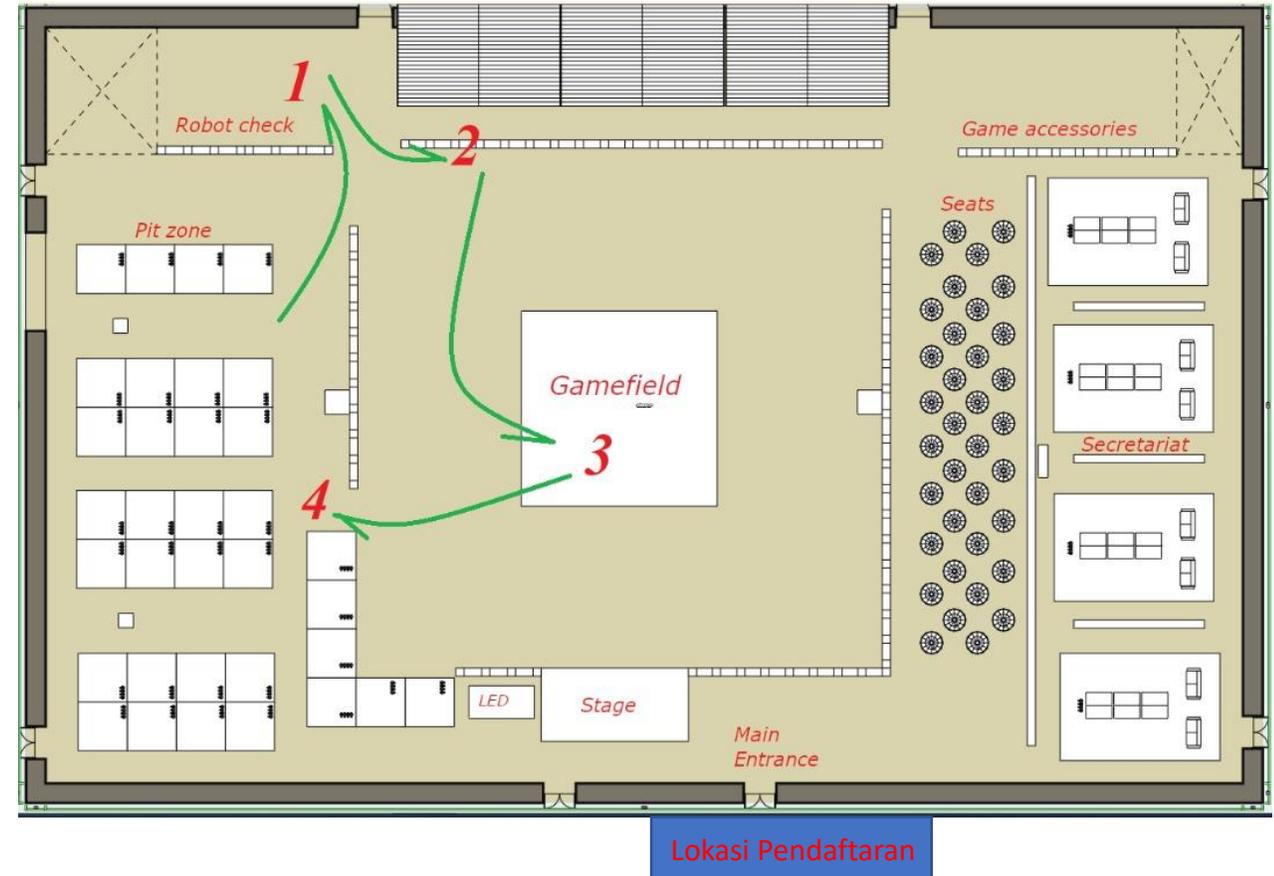


Lokasi Pendaftaran

TEAM MOVEMENT DURING TOURNAMENT

The flow:

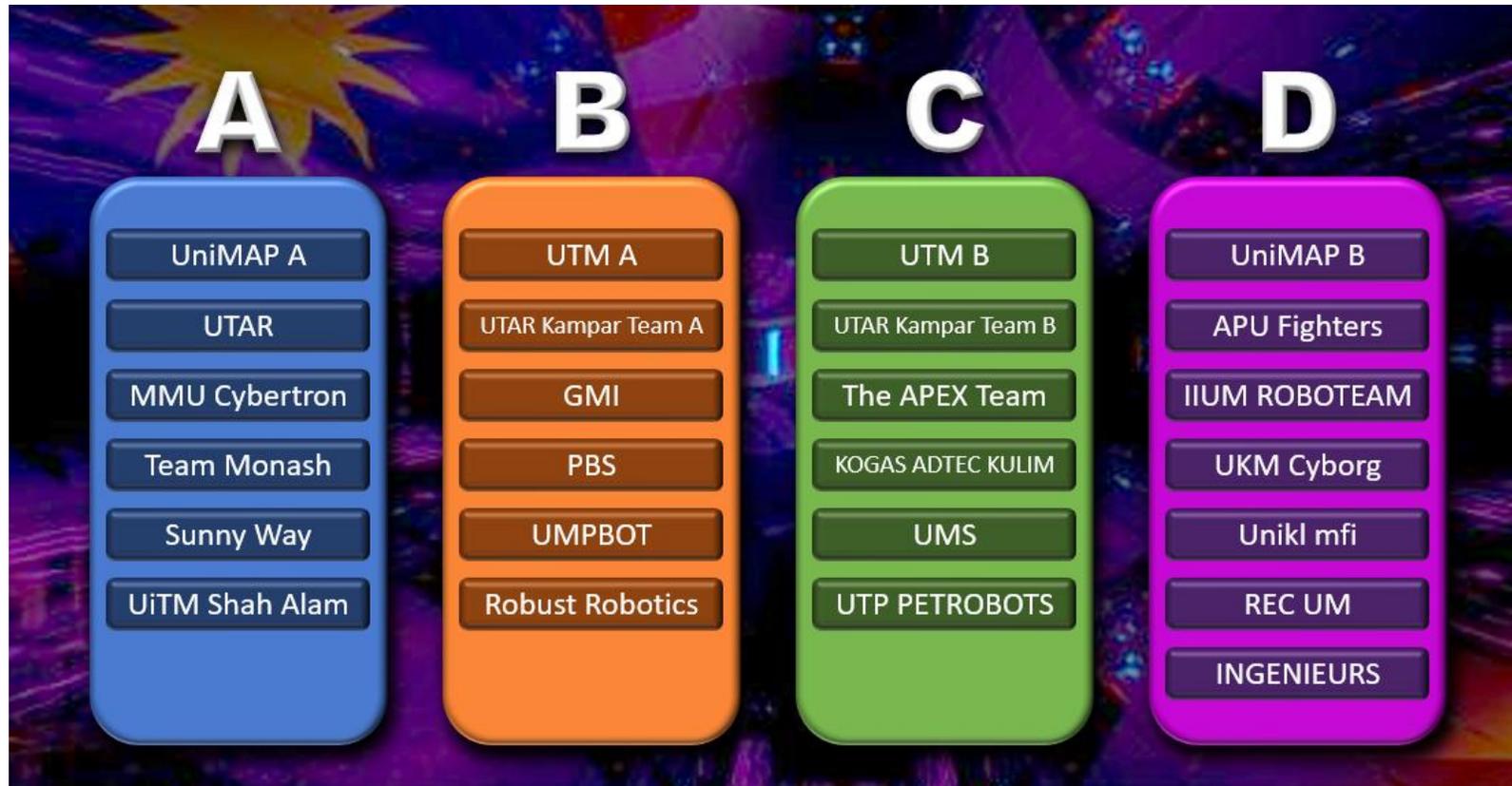
- Be at the **robot check 1** ten minutes before your match
- If your robot pass the check, you will be directed to **standby zone 2**
- You may enter the **game field 3** once you are called
- You must leave the **game field 3** as soon as you have completed the game through an **opening 4** and return to your pit



KEBERADAAN SETIAP PASUKAN

- pasukan perlu hadir sehingga tamat program supaya dapat meneruskan proses pertukaran idea dan inovasi serta terlibat dalam proses pemindahan teknologi dengan pasukan lain.
- Pasukan juga dijangka dapat mempelajari kelebihan pasukan yang menang seterusnya membantu meningkatkan prestasi pada masa akan datang.
- Naib Canselor dari universiti yang bertanding akan dijemput ke majlis penutup. Keberadaan pasukan masing-masing adalah diperlukan bagi sama-sama menjayakan program ini.

TEAM GROUPING



GROUP STAGE MATCHES

Time	Day 2 (3rd June 2022)	
	Blue	Red
9:00	UniMAP B	APU Fighters
9:10	UTM B	UTAR Kampar Team B
9:20	UTM A	UTAR Kampar Team A
9:30	UniMAP A	UTAR
9:40	IIUM ROBOTTEAM	UKM Cyborg
9:50	The APEX Team	KOGAS ADTEC KULIM
10:00	GMI	PBS
10:10	MMU Cybertron	Team Monash
10:20	Unikl mfi	REC UM
10:30	UMS	UTP PETROBOTS
10:40	UMPBOT	Robust Robotics
10:50	Sunny Way	UiTM Shah Alam
11:00	UniMAP B	INGENIEURS
11:10	UTAR Kampar Team B	The APEX Team
11:20	UTAR Kampar Team A	GMI
11:30	UTAR	MMU Cybertron
11:40	APU Fighters	IIUM ROBOTTEAM
11:50	KOGAS ADTEC KULIM	UMS
12:00	PBS	UMPBOT

Time	Day 2 (3rd June 2022)	
	Blue	Red
14:30	Team Monash	Sunny Way
14:40	UKM Cyborg	Unikl mfi
14:50	UTM B	UTP PETROBOTS
15:00	UTM A	Robust Robotics
15:10	UniMAP A	UiTM Shah Alam
15:20	APU Fighters	REC UM
15:30	UTAR Kampar Team B	UMS
15:40	UTAR Kampar Team A	UMPBOT
15:50	UTAR	Sunny Way
16:00	Unikl mfi	INGENIEURS
16:10	UKM Cyborg	REC UM
16:20	IIUM ROBOTTEAM	Unikl mfi
16:30	REC UM	INGENIEURS
16:40		
16:50		

GROUP STAGE MATCHES

Time	Day 3 (4th June 2022)	
	Blue	Red
9:00	INGENIEURS	APU Fighters
9:10	The APEX Team	UTM B
9:20	GMI	UTM A
9:30	MMU Cybertron	UniMAP A
9:40	REC UM	UniMAP B
9:50	KOGAS ADTEC KULIM	UTAR Kampar Team B
10:00	INGENIEURS	IIUM ROBOTTEAM
10:10	PBS	UTAR Kampar Team A
10:20	Team Monash	UTAR
10:30	Unikl mfi	APU Fighters
10:40	UTP PETROBOTS	The APEX Team
10:50	Robust Robotics	GMI
11:00	UiTM Shah Alam	MMU Cybertron
11:10	UKM Cyborg	UniMAP B
11:20	UMS	UTM B
11:30	UMPBOT	UTM A
11:40	Sunny Way	UniMAP A
11:50	REC UM	IIUM ROBOTTEAM
12:00	UTP PETROBOTS	KOGAS ADTEC KULIM

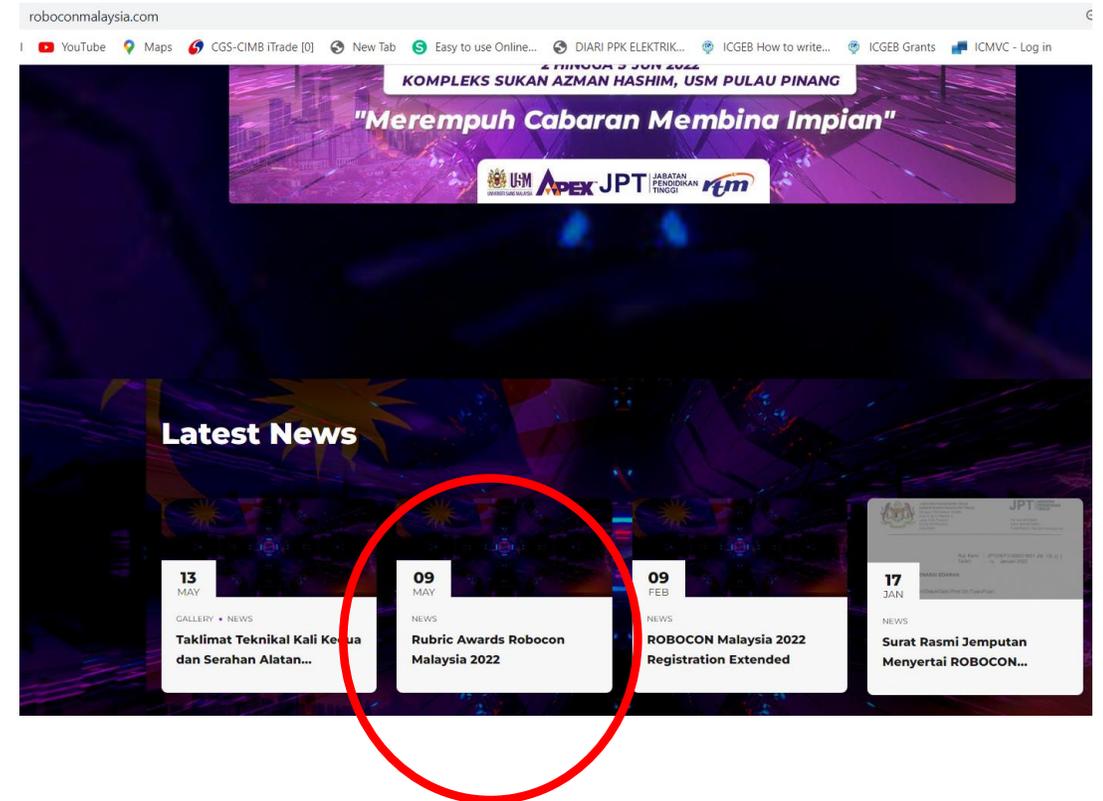
Time	Day 3 (4th June 2022)	
	Blue	Red
14:30	Robust Robotics	PBS
14:40	UiTM Shah Alam	Team Monash
14:50	INGENIEURS	UKM Cyborg
15:00	UMS	The APEX Team
15:10	UMPBOT	GMI
15:20	Sunny Way	MMU Cybertron
15:30	UniMAP B	Unikl mfi
15:40	UTP PETROBOTS	UTAR Kampar Team B
15:50	Robust Robotics	UTAR Kampar Team A
16:00	UiTM Shah Alam	UTAR
16:10	APU Fighters	UKM Cyborg
16:20	KOGAS ADTEC KULIM	UTM B
16:30	PBS	UTM A
16:40	Team Monash	UniMAP A
16:50	IIUM ROBOTTEAM	UniMAP B

ROUND OF BEST EIGHT



ROBOCON AWARDS (ANUGERAH KHAS)

- ❑ **Pemarkahan anugerah khas akan dijalankan pada Sabtu 4 Jun 2022**
- ❑ **Pastikan anda berada dan bersedia di Pit pada hari tersebut**
- ❑ **Bagi mendapatkan gambaran pemarkahan Anugerah Khas, anda disaran merujuk rubrik pemarkahan yang telah dimuat naik di roboconmalaysia.com**



MAKLUMAT TAMBAHAN

Dimaklumkan bahawa pihak penganjur memerlukan dokumen/ maklumat tambahan iaitu

1. Abstrak Pasukan yang mengandungi Penerangan berkaitan pasukan yang tidak melebihi 250 patah perkataan.
2. Satu @ dua keping gambar sepasukan (ahli-ahli) bersama-sama logo universiti dan robot .
Jika robot belum tersedia, hanya perlu bergambar dengan logo universiti sahaja. (Resolusi 300dpi)

Maklumat 1 dan 2 ini perlu disediakan dalam bentuk Power Point dan dimuat naik dalam bahagian yang sama dengan Laporan Teknikal selewat-lewatnya pada **20 Mei 2022** di <https://ezreg.usm.my/>

*Laporan Teknikal (MS Word only)

* Abstrak Pasukan (MS Power Point only)

MAKLUMAT TAMBAHAN

Skymind propose a session for ROBOCON (technical sharing/training):

- Date: 23/5/2022 (Monday)
- Time: 9am – 6pm
- Meeting platform: Zoom
- Meeting link: <https://us02web.zoom.us/j/84792007738>

Taklimat ke-3: Recorded Webex Session

<https://usm-cmr.webex.com/recordingservice/sites/usm-cmr/recording/3e9cf152ba36103a8dff726d38a57323/playback>

TEST RUN SLOT: BY VOTING PROCESS



PIT VOTING RESULT

Pit	Time slot	Team
1	10.00 am	APU Fighters
2	10.10 am	KOGAS ADTEC KULIM
3	10.20 am	PBS
4	10.30 am	UMS
5	10.40 am	Team Monash
6	10.50 am	Sunny Way
7	11.00 am	UKM Cyborg
8	11.10 am	REC UM
9	11.20 am	INGENIEURS
10	11.30 am	GMI
11	11.40 am	UTP PETROBOTS
12	11.50 am	UTAR
13	12.00 pm	UniMAP A
14	12.10 pm	UniMAP B
15	12.20 pm	The APEX Team
16	12.30 pm	UMPBOT
17	02.30 pm	Robust Robotics
18	02.40 pm	UTM A
19	02.50 pm	UTM B
20	03.00 pm	UiTM Shah Alam
21	03.10 pm	IIUM ROBOTTEAM
22	03.20 pm	UTAR Kampar Team A
23	03.30 pm	UTAR Kampar Team B
24	03.40 pm	Unikl mfi
25	03.50 pm	MMU Cybertron

TERIMA KASIH

