

NATIONAL ROBOTICS COMPETITION

Welcome to National Robotics Competition 2022

Main Organiser:



Operational Partner:



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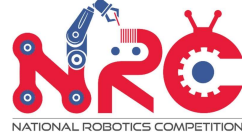


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WRO RoboMission (Previously known as WRO Regular Category)

Primary: 8-12 years old | Secondary: 13-16 years old | Tertiary: 16-19 years old

WRO Future Innovators (Previously known as WRO Open Category)

Primary: 8-12 years old | Secondary: 13-16 years old | Tertiary: 16-19 years old

WRO Future Engineers

14-19 years old

NRC Junior Robotics (Previously known as WeDo)

6-10 years old

NRC Pre-school (NEW)

4-6 years old

CoderZ Coding Challenge (Online)

Primary: 8-12 years old | Secondary: 13-16 years old

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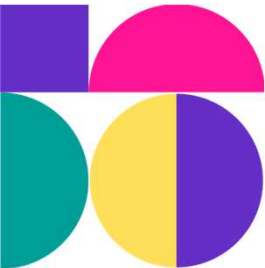
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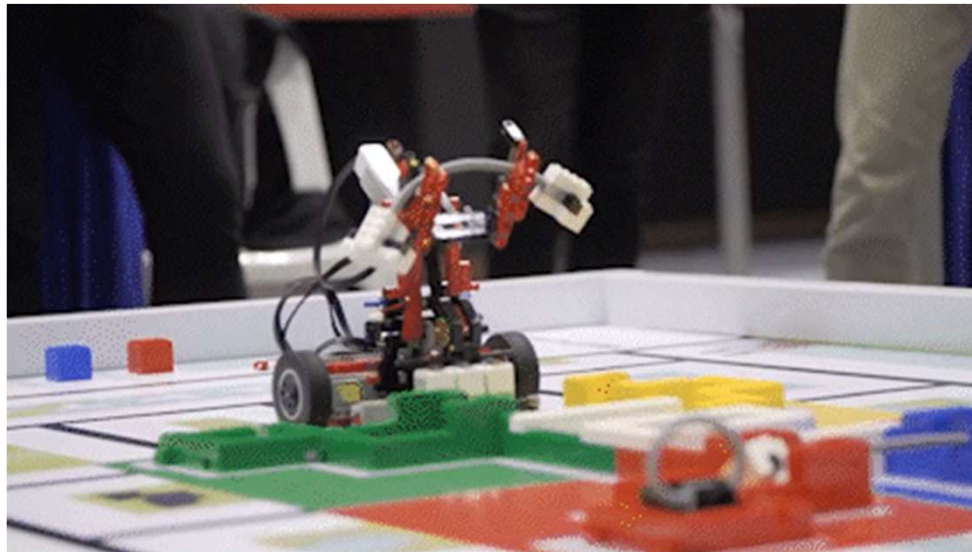


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**Held live on-site at Science Centre Singapore
from 23 August to 10 September 2022**



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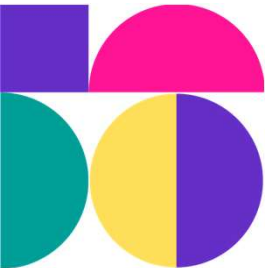
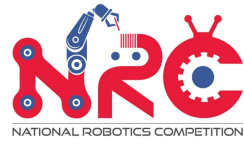
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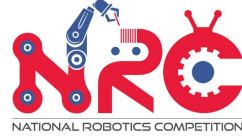
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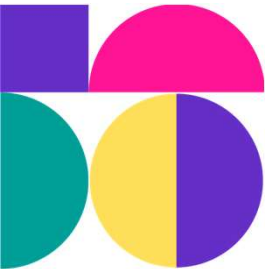
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NRC Junior Robotics Category 2022



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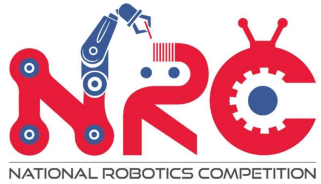
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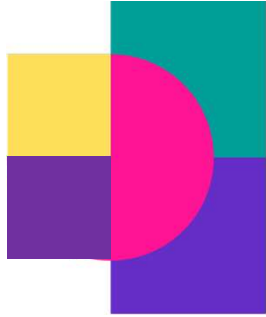
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Agenda for the Webinar



- Introduction to the NRC Junior Robotics Category
- Introduction to Gameplay
- Scoring
- Final's Requirement
- Important Dates

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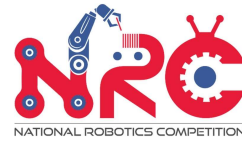
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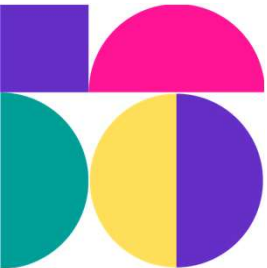
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Introduction to Gameplay



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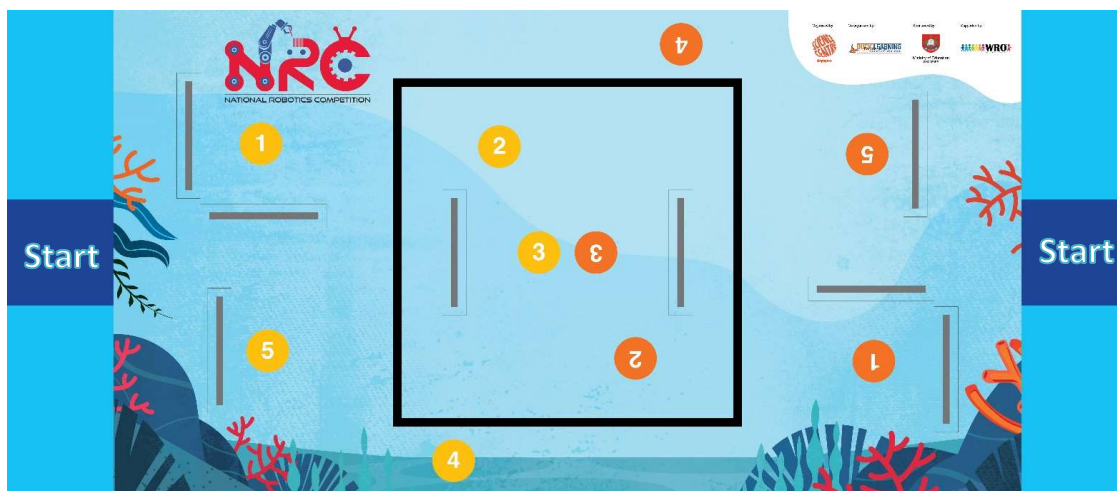
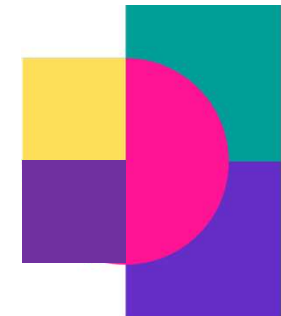
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NRC Junior Robotics (WeDo) Category 2022



- Rules based competition

Missions

1. Drop the sensor at a pre-determined location
2. Collect the 5 animal specimens
3. Avoid the obstacles
4. Mystery challenge
5. Park the robot

Main Organiser:



Operational Partner:



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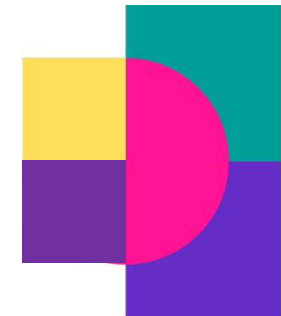
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NRC Junior Robotics (WeDo) Category 2022



- Ages: 6-10
- Team size: 2-3 students guided by 1 coach/mentor
- Robot Games



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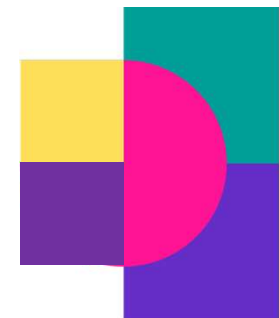


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Allowed Robot Systems



- LEGO Education WeDo 2.0 Core Set or Spike Essential Set



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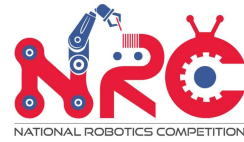
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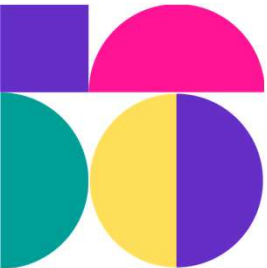
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Scoring



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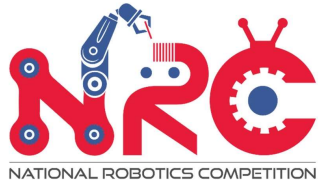
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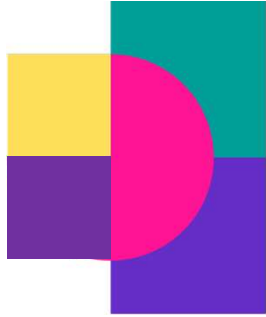


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Overall Scoring

- Presentation and Q&A (30%)
- Challenge (70%)



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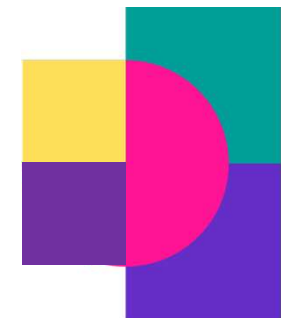
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Scoring of Presentation



- Page 8 of General Document
- 20 points for programming and building + 10 points for presentation

Criteria	Score
Programming and Building How did they program their robot How did they design the robot What did they learn during the process	20
Presentation Communication of ideas Quick Thinking	10

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Scoring of Missions

- Page 15 of Challenge Booklet
- 200 points for missions + 25 points for mystery challenge
- 1 practice run + 2 attempts

Game Field Score

Tasks	Each	Total / Max
Drop the Sensor at a pre-determined location		
Sensor fully within the correct circle and without an animal inside the circle	25	25
Sensor touching the correct circle or with an animal inside the correct circle	15	
Sensor within or touching another circle	5	
Collect the five animal specimens		
Animals out of their circle and within the dark blue zone	25	125
Animals out of their circle and above the water zone	15	
Animals out of their circle but not above the water zone	5	
Avoid the Obstacles		
Obstacles within the grey box	10	40
Obstacles within the white box	5	
Park the robot		
Robot within Dark Blue Zone Teams can only score these if the robot has scored points in the other section.	10	10
Robot within Light Blue Zone Teams can only score these if the robot has scored points in the other section.	5	
Maximum Score		200
Mystery Challenge		
To be announced on day of challenge.	25	25

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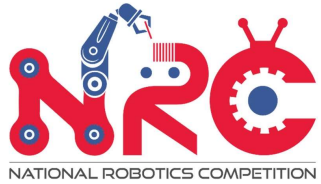
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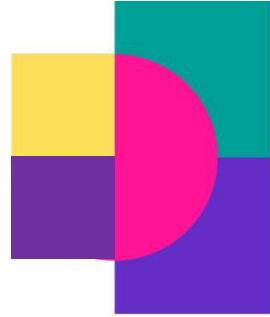
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Important Date



Dates	Competition	Venue
30 th August 2022	WRO Junior Robotics (WeDo) Challenge	On-site at Science Centre Singapore

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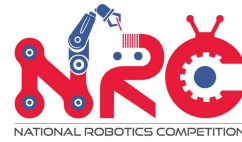
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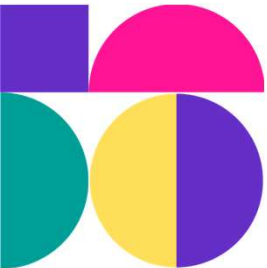
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Contact us/ Updates/ FAQ



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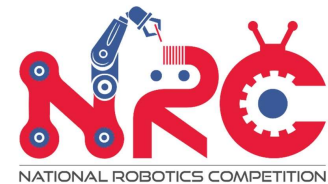
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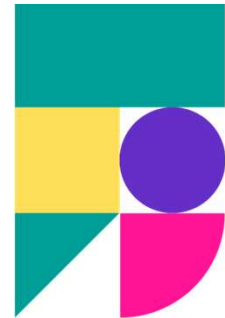
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