WAYA ROBOTICS COMPETITION 2.0

(National Robotics Championship 2026)

SCHOOL CATEGORY

Beginner to Intermediate Challenge

Organized by	Waya Robotics Club (WRC) Students' Union- Faculty of Technology Wayamba University of Sri Lanka Wayamba Engineering Technology Society (WETS) Waya Nano Club IESL Student Chapter Wayamba University of Sri lanka
University	Wayamba University of Sri Lanka
Competition Date	31 OCT 2026
Venue	Pandith Amaradewa Auditorium, Wayamba University of Sri Lanka

OFFICIAL COMPETITION RULEBOOK

This rulebook is prepared from the official WAYA Robotics Competition 2.0 proposal. Detailed technical guidelines and any final arena changes will be communicated officially before the competition.

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1. Competition Purpose

WAYA Robotics Competition 2.0 is a national-level robotics competition designed to promote robotics, innovation, practical engineering skills, creative problem solving, and hands-on technical exposure among students in Sri Lanka.

2. Eligibility

- The School Category is open to schools in Sri Lanka.
- The University Category is open to recognized universities in Sri Lanka.
- Each participant must be a registered student of the school or university represented by the team.

3. Team Composition

- Minimum team size: 1 member.
- Maximum team size: 4 members.
- All team members must belong to the institution represented by the team.

4. Robot Eligibility and General Technical Rules

- Only fully autonomous robots are permitted.
- Maximum robot size: 25 cm × 20 cm.
- Internal power supply must not exceed 24 V.
- Remote control of the robot is not allowed.
- The robot must include a kill switch.
- The robot must not damage the arena or competition equipment.
- Remote AI agents must not be used on development boards.
- The maximum advanced development platform specified in the proposal is Raspberry Pi; NVIDIA boards are not permitted.
- Each team will be given a maximum of **one minute (1 minute)** for robot calibration before the official run begins.
- No major hardware modifications, code uploading, or replacement of robot components are allowed during the calibration period.
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- Detailed technical guidelines will be shared with participants by the organizers.

5. General Arena Information

- Arena background: white.
- Arena line color: black.
- Line width: 3 cm.
- Wall distance apart 30 cm
- Arena sections are tentatively 6 ft × 6 ft; dimensions may change with future developments.
- Safe and durable materials will be used.
- The organizers may make necessary changes to the arena before the competition.

6. Safety

- Teams must operate robots responsibly and follow organizer instructions.
- The robot must have a functional kill switch.
- Robots must not intentionally or negligently damage the arena.
- Electrical and technical safety instructions issued by the organizers must be followed.

7. Judging and Final Authority

- Total score: 100 marks.
- Task Completion: 40 marks.
- Speed Performance: 30 marks.
- Completion Consistency: 15 marks.
- Judges' Evaluation: 15 marks.
- The judges' decision is final.

8. Category-Specific Challenge

The School is designed as a beginner to intermediate challenge challenge. The following tasks are identified in the official competition proposal:

- Straight line navigation.
- Turning points.
- 90-degree turns.
- Uncompleted line detection.
- Passing through a path between two walls.
- Open path navigation.
- Obstacle navigation.

Task and Arena Notice

The final tasks, exact arena layout, and detailed technical guidelines will be officially released by the organizers before the competition. The proposal states that arena arrangements may be changed if necessary.

Category Notes

- The proposal describes this as a beginner-to-intermediate challenge focused on the fundamentals of robotics.
- The School Category arena may be changed if necessary.

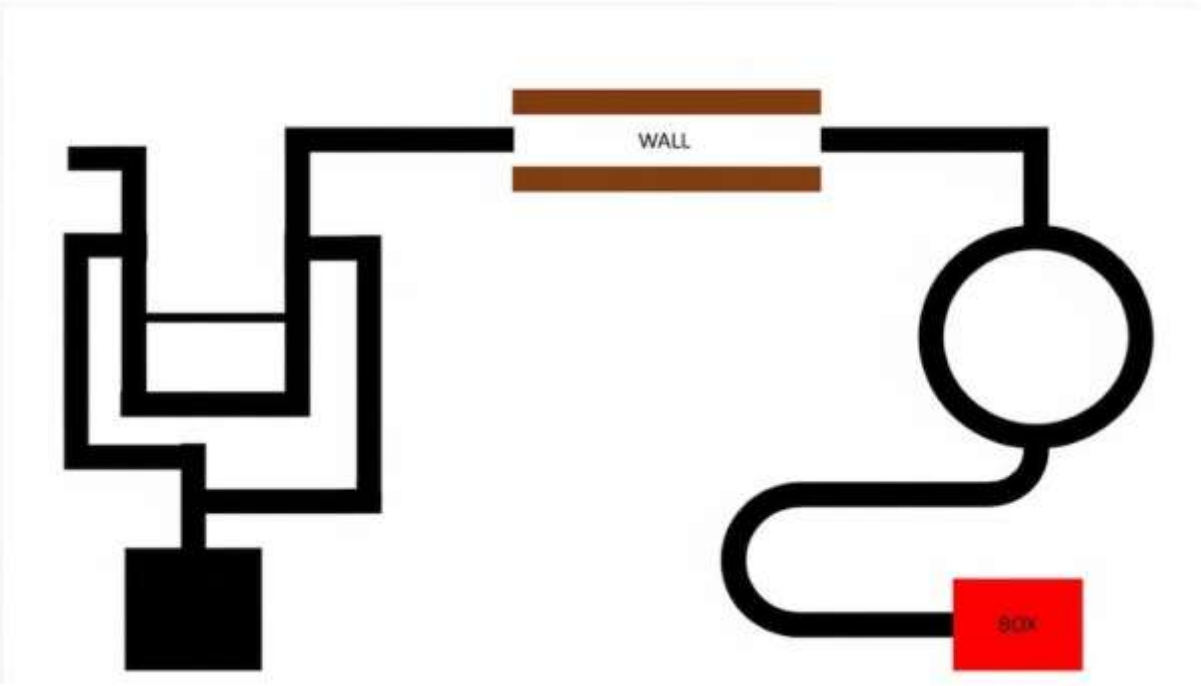
9. Competition Procedure

- Teams must submit their robots during the official robot submission period.
- Robots may be inspected for compliance with the published technical requirements.
- Each team will be given **three (3) official runs** during the competition.
- The best-performing run out of the three attempts will be considered as the team's **final result**.
- The best run will be determined based on the published scoring categories (Task Completion, Speed Performance, and Completion Consistency).
- Teams must follow instructions given by technical officials and judges.
- Only eligible autonomous robots may participate in official scoring runs.
- Competition runs will be conducted according to the finalized arena and schedule.
- The organizers may stop a run for safety, technical, or arena-related reasons.
- The judging panel will record scores according to the published scoring categories.

Published Event Schedule

Activity	Time
Robot submission	8:30 am – 10:00 am
Welcome speech	10:00 am – 10:15 am
Competition starts	10:15 am
Refreshments	11:30 am
Competition continues	11:45 am
Lunch	1:30 pm – 2:10 pm
Competition ends	4:30 pm
Prize awarding / certificates	5:15 pm
Event ends	6:00 pm

10. Arena Map and Obstacle Layout (Subject to change.)



11. Awards and Recognition

Place	Recognition	Cash Prize
1st	Championship Trophy + Official Certificate	Rs. 30,000
2nd	Trophy + Official Certificate	Rs. 25,000
3rd	Trophy + Official Certificate	Rs. 15,000

- Participation e-certificates will be awarded to all registered teams that successfully compete.

12. Organizer Authority and Changes

- The organizers may update the arena, task details, or technical instructions when necessary.
- Any official changes communicated to registered teams become part of the competition requirements.
- Judges' decisions on competition scoring are final.
- Participants are responsible for checking official announcements before the event.

13. Administration

The competition is organized by the Waya Robotics Club (WRC) and Wayamba Engineering Technology Society (WETS), Wayamba University of Sri Lanka, with academic guidance from the Faculty of Technology.

Main Advisor: Dr. I.P.M. Wickramasinghe, Dean, Faculty of Technology, Wayamba University of Sri Lanka.

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