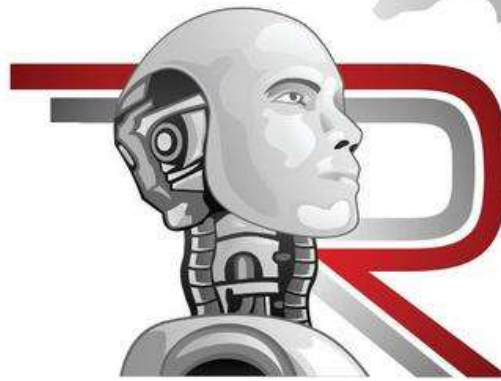


RoboRAVE
Australia



Entrepreneurial

Revision 3 - Updated 17/04/2024.

2024 Official Game Manual
RoboRAVE Australia

Our motto: *"Today's Play, Tomorrow's Pay."*



Revision History		
Revision	Date	Description/Changes
1	27/01/2024	2024 Challenges Released
2	04/03/2024	Graphics updated
3	17/04/2024	Team limit increased to 5. Split HS and UP division.

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1.0 Overview

1.1 What is Entrepreneurial?

Entrepreneurial is an innovative gateway to the future of technology and business. In this unique challenge, teams are tasked with designing robots that showcase not just engineering excellence but also market potential. This stage is a testing ground for ideas that could shape future tech competitions or kickstart business ventures, encouraging participants to think beyond the present.

The competition intensifies as teams set up presentation stalls, showcasing their robots as prototypes. Here, marketing prowess comes into play, with teams creating promotional materials to pitch their robot as the next big thing in technology.

Distinct from our other challenges, Entrepreneurial nurtures a blend of STEM skills and entrepreneurial spirit. It's an extraordinary opportunity for participants to experience the intersection of technology and business, preparing them for the multifaceted world of tech innovation.

1.2 Who can compete in a team?

Entrepreneurial is offered to students in the following merged divisions:

- 1) Elementary School (ES) – Ages 8-10
- 2) Middle School (MS) – Ages 11-13
- 3) High School (HS) – Ages 14-18
- 4) University/Professional (UP) – Ages 19+

The division a team enters is dependent on the oldest team member in that team at the time of registration. Teams can choose to enter a higher age division but cannot enter a lower one.

Teams should consist of 1-5 competitors. Teams with more than 5 members will not be allowed to compete in the competition or will be forced to register additional teams to compete.

1.3 What are the requirements for the robot?

Robots must fit all of the following criteria to be eligible to compete:

- 1) The total cost of the robot does not exceed \$3,000 USD.
- 2) Robots can be made from any platform and material.
- 3) Multiple sensors, motors, and processing units can be used.
- 4) The robot can be autonomous or use remote-control features.
 - a. Devices such as remotes or tethers can be used to control the robot.
- 5) Robots should demonstrate a proof-of-concept for a team's product.
 - a. The proof-of-concept should showcase the intended usage of the product and is not intended to be a minimal-viable product.
- 6) The robot must demonstrate input-process-output logic.
 - a. The input-process-output logic is intended to demonstrate some of the product's functionality.
 - b. Examples could include a sensor/button input being processed in a program and creating motor/screen movement as an output.

2.0 Operating the Game

2.1 How does an official game run?

Preparation:

- 1) Teams will begin setting up their stall at their designated presentation booth using their own and provided equipment.
- 2) Stalls could include the prototype robot, posters, business cards/pamphlets, promotional videos, banners, etc.

Voting Period:

- 1) Teams may remain at their stalls to present to voters passing by pitching their product and demonstrating its functionality.
- 2) Teams may also venture out into the competition to distribute business cards/pamphlets or showcase product functionality. However, it is always recommended that at least one team member remain at the stall.
- 3) At a specified time on the day, each team will also complete a 5-minute judging session with a small panel of professional judges and/or VIPs.
- 4) At the end of the day the Peoples Choice and Judges Choice awards winners will be announced.

2.2 What are the rules in an official game?

The following rules are enforced during official competition games by the referee:

- 1) The referee will ensure the team and robot are compliant with the rules in 1.2 and 1.3. If the referee believes any of the eligibility criteria are not met, the Head Referee will be brought in to determine further actions.
 - a. A team or robot that does not meet the eligibility criteria will usually not be allowed to compete and be required to make changes based on the Head Referee's decision.
- 2) The game lasts for a specified voting period during the event (e.g., 9 am-2 pm) and is the only time the team can score points.
- 3) The referee will ensure teams will have available to them a 3m booth space with a 1.6m table, 2 chairs, and power. All other materials must be provided by the team.
- 4) Points are earned through votes by other competitors, volunteers, spectators, or VIPs. Each vote is cast using a token at the specified voting station.
 - a. All voters are only permitted to vote once.
 - b. Team members and associates can vote for their team but are encouraged to vote for the product they think is best.
- 5) Teams are not permitted to have giveaways or distribute items (i.e., lollies and trinkets). Teams are only permitted to distribute business cards and pamphlets promoting their robot, product, or team.
 - a. Teams found to be doing giveaways or using bribery may face penalties or disqualification.
- 6) Only competitors can operate the robot and stall during the competition. Remember, "Players Play, Coaches Coach, Parents Cheer".

3.0 Competition Stall

3.1 What does a competition stall need?

All competition stalls should meet the following criteria:

- 1) Stalls should fit within the 3m booth space provided to each team.
- 2) Teams must have their robot prototype for demonstration.
- 3) Teams should have business cards or a 1-page business pamphlets available.
 - a. Business cards require the team's name and product name.
 - b. Pamphlets should include the team's name, product name, and information about the product.
- 4) HS/UP competitors should also have a 60-90-second promotional video on display.
 - a. The video could include product demonstrations, interviews, or other promotional material.
- 5) Teams may optionally include other stall features such as posters, banners, tablecloths, and laptops/screens.

Example stall setups for Entrepreneurial:



4.0 Points and Scoring:

4.1 How are points awarded from votes?

Votes are counted by volunteers and are not revealed publicly, only the final point score.

- 1) **Token Vote (1p/vote)** – A vote from a regular attendee is worth 1 point.
 - a. Attendees can only vote once with the provided token.

The team in each division with the most votes will win the People's Choice award. If a team wins the Judges Choice award as well, the team with the second most votes will instead win the People's Choice award.

4.2 How are points awarded from judges?

At the event during a designated time period, each team will be given 5 minutes to present their idea to a small panel of judges.

1. Teams have up to 5 minutes to present to the judges and for judges to ask questions to the team. It is expected all team members are present for the judging session.
2. Teams will present at their booths and are expected to show their robot prototype, business cards/pamphlets, and/or other presentation materials.
3. Judges may consist of industry professionals, VIPs, or RoboRAVE staff.

Teams will be judged on several aspects of their product, stall, and presentation. Judges will use this official marking rubric as a guideline. The team that scores the highest score overall on the rubric in each division will win the Judge's Choice award.

Problem		Robot Solution		Presentation	
Problem	Is the problem being solved a real challenge/threat.	Function	Does the robot demonstrate interesting functionality?	Pitch	How well did the team present the idea?
Research	How much research has the team conducted?	Unique	How unique or innovative is the product?	Style	How well made is the stall?
Solution	Does their product address the problem?	Viable	Is the robot viable as a real product?	Public Speaking	Was the presenter well-rehearsed/ knowledgeable
___/10		___/10		___/10	
Comments:					