



# ROBOT CHALLENGE

Egypt 2022

# FREE STYLE

## Competition



# Robot Challenge Egypt 2022

## “ Freestyle Rules ”

### **This Category is**

In Robotchallenge freestyle category teams develop a robot , control circuit or embedded system that helps to solve real-world problems. Each team develops an innovative and functioning robotic solution. They present their project in the competition day.

### **Allowed Ages**

- Junior (9-13 years old).
- Senior (14-18 years old).
- Adult (19-24 years old).

### **Area of development**

- Research and development: Identify a specific problem within the season research and come up with creative solution.
- Prototyping: Turning your idea into functional robot solution
- Technical engineering skills: Using sensors and motors to make robot design solve problem
- Innovation
- Presentation skills



## Specifications

- No restrictions of using any type of robot.
- Teams can use any software – programming language to code the robotic solution.
- Before the competition day each team must send an abstract of the project.
- Each team must bring scientific poster for the project. The maximum size of the poster is (122 cm width x 274 cm height).

## Scoring

- The project will be judged by multiple judges. One judge per the round.
- Teams will be judged on: The idea and its applicability in real life.
- Designing of solution and its modifications.
- Innovation technology and the code.
- The presentation, poster and the interview with judges.



## Rubric of Freestyle Rc

<b>THE IDEA</b>	Was the problem or need specified and mentioned clearly?	<u>4</u>
	Idea, Quality, and the creativity	<u>4</u>
	Social impact and need	<u>4</u>
	Research and report	<u>4</u>
	Is the idea economically feasible as a product? Is the solution a significant improvement over the previous alternative?	<u>4</u>

**Total 20**

<b>Innovation Technology</b>	Does the team know the constraints for their solution?	<u>5</u>
	Meaningful use of engineering concepts	<u>5</u>
	Robotic Solution	<u>5</u>
	Code Efficiency & Software Automation	<u>5</u>

**Total 20**



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<b>Design developments</b>	Were the criteria and the constraints for their solution mentioned clearly?	<u>5</u>
	Was the link between the solution design and the idea clearly mentioned?	<u>5</u>
	Does the team clarify the criteria needed for their robot design?	<u>5</u>
	Did the design pass through many modifications?	<u>5</u>

**Total 20**

<b>PRESENTATION &amp; TEAM SPIRIT</b>	How was the team's presentation?	<u>10</u>
	Does the poster include the essential elements of the poster?	<u>4</u>
	Team Spirit	<u>6</u>

**Total 20**

<b>TOTAL</b>	<u>100</u>

**For further questions:**

**Technical Support: 01022758877**

**Good Luck**



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